

3.0 URBAN DESIGN AND DEVELOPMENT POLICY

3.1 GENERAL DESIGN POLICIES

Urban design deals with all aspects of urban life, from the sociology of the streets to the vitality of public spaces, from the creation of built environments to the management of these environments. Built environments define and articulate open space. For that reason, buildings that delineate quality urban open space must be of a form, mass, texture, color, and orientation that support the desired urban character. Within the Levi-Cushman Specific Plan area, a series of basic design themes are established. At the time of the first PCD/PRD submittal, these themes will be refined and detailed as part of a project design manual that covers architectural design, streetscape design, street planting, signage, floodway channelization, and a grading and erosion-reduction program.

An important environmental concern that has directly affected design of the entire project involves development adjacent to the floodway. The San Diego River Wetlands Management Plan notes that a "design sensitive zone" extends 150 feet from the wetlands corridor and requires special consideration to protect the wildlife value of the wetlands corridor. To minimize impacts of development on the wetlands corridor, the Wetlands Management Plan requires:

- A buffer area between the wetlands corridor and development along the entire length of both sides of the river;

- Passive public recreation along the river corridor, including pathways located along the edges of the wetlands;
- Reflective plate glass must not be used on buildings which face the river;
- Lighting for safety must be directed rather than general and should not illuminate habitat areas; and
- Buildings should be designed so that the skyline slopes toward the wetlands, allowing a wider flight path for birds.

These criteria were directly employed in the overall project design and, when appropriate, are specifically addressed by design policies.

3.1.1 Basic Design Themes

River Corridor: The San Diego River will act as the central focus of the entire LCSP development. Views will be preserved throughout the site into the enhanced wildlife and waterfowl river habitat.

Valley Setting: To echo the natural character of the Mission Valley setting, building heights will be terraced, with the largest and tallest structures generally located away from the San Diego River, at the perimeter of the development.

View Corridors: Preservation of the river corridor as the central view of the project and maintenance of view corridors throughout the project will serve to provide a visual openness to the development and will unify the river focus and urban character of the project.

Open Space Network: Within the LCSP area, open space areas will be interspersed throughout the site and linked to one another. Open areas will be defined and accentuated with corner monuments (entry signage), a central theme tower, an island, bridges, fountains, pools, and appropriately placed building - elements that will unify the project and make the entire mixed-use development visually whole and economically viable. Maintenance of all open areas will be funded by property owners.

The Island: The island (Parcel D) will be located on the south shore of the river and will serve as the prime activity center of the project area for retail and restaurant uses. It will provide a sense of central place for pedestrian use within the development.

Theme Tower: A dramatic tower is proposed to rise from the island to serve as the central focal point of the development and direct pedestrian usage to the island center.

Pedestrian Bridges: A major pedestrian bridge will span the San Diego River and link the north side of the river to the island. The bridge will be a highly active pedestrian route lined with temporary and varied retail uses such as food and flower kiosks. It will also provide transit and emergency vehicle ac-

cess to the island. A series of small bridges will cross a man-made canal south of the island and link with development south of the river. The canal will be lined on both sides with a highly urbanized riverwalk.

3.1.2 General Design Guidelines

Adapted from the San Diego City Zoning Ordinance, Sections 101.0900K, 101.0910D, and 101.0920D:

- (a) All development shall read as part of a single comprehensive project.
- (b) All development shall conform to the adopted plans of applicable government agencies.
- (c) All development plans shall provide for necessary circulation, open space, and off-street parking requirements.
- (d) All developments shall be functionally harmonious with existing or proposed adjoining uses.
- (e) All internal street systems shall be designed for safe and effective flow of vehicles without having a disruptive effect on facilities or common areas.
- (f) All facilities and structures shall be well-oriented to the topography of the site and well-integrated with the natural landscape features inherent to the site.

(g) All recreational and common areas shall be linked through an open space network.

3.2 ARCHITECTURAL CONSIDERATIONS

The design criteria and objectives included in this Specific Plan are intended to define and guide development in order to create a visually and functionally integrated urban environment.

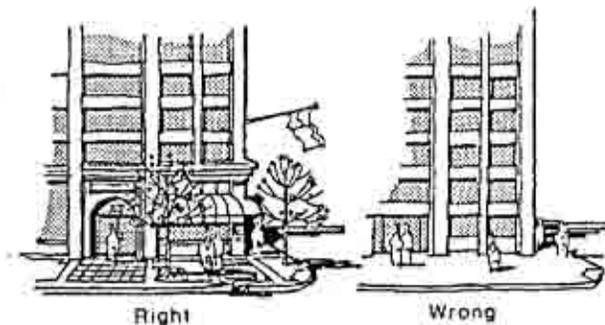
While detailed architecture will be defined at the time of the first PRD/PCD submittal, signature characteristics of the project will be its profuse landscaping and building forms that are contemporary, simple, and constructed of quality materials. Classic and functional architecture will extend throughout the project area. Reflective glass will not be used in any manner prohibited by the Mission Valley Community Plan.

Consistent architectural themes will be emphasized throughout the development in design, color, and finish as well as signage and landscaping. This consistency of themes will serve to unify the development, giving it a distinctive and widely recognized identity. The architecture should be harmonious within the project and complementary to the whole of Mission Valley. Tall buildings will enhance view corridors and provide ground-level landscape areas. These open areas can host shopping, eating, drinking, browsing, and other pedestrian activities.

Height limits are defined within three height "bands" moving away from the river channel, as shown in Figure 3.1. The intent is to echo the valley form by having heights increase from the center of the project (the San Diego River) to the periphery (Friars Road, Street B). On the island, low-rise development will have a maximum height of 42 feet, except for the theme tower which will have its height determined during the review of the PCD for Development Area 1. A stepped-back profile is required of structures in the midzone, where height maximums range from 42 feet to 140 feet. At the perimeter zone, the third zone away from the channel, structures up to 250 feet will be allowed.

3.2.1 Materials and Treatments

- Construction materials shall convey the character of an urban project and reflect the Mission Valley setting.
- Special attention shall be paid to roof area treatment and materials in all buildings. Mechanical equipment shall be



DESIGN FEATURES INCREASE INTEREST
AT STREET LEVEL



LEGEND

-  LOW ZONE 42' MAXIMUM
-  MID ZONE 42'-140' MAXIMUMS
-  PERIMETER ZONE 140'-250' MAXIMUMS

 THEME TOWER

SEE IMPLEMENTATION GUIDELINES FOR HEIGHT ENVELOPE ISOMETRICS

**LEVI - CUSHMAN
SPECIFIC PLAN**



Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

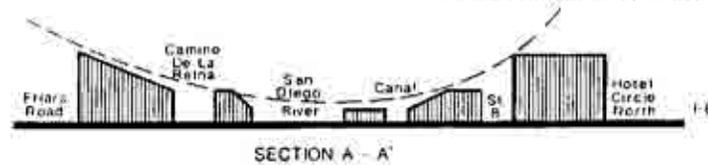


FIGURE 3.1

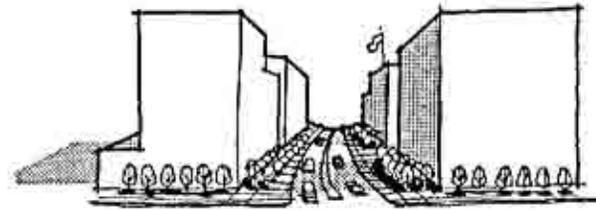
HEIGHT ZONES

enclosed. Pitched or other special roof forms are preferred when roofs are not intended for human activity.

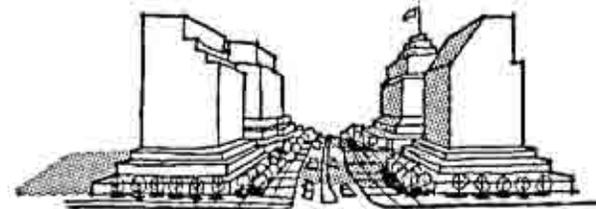
- Design features shall be incorporated in all structures to increase visual interest at street level.
- Transition element plant materials and/or berms shall be used wherever structures interface with the ground plane to create interest and to integrate the site with architectural forms with the site.

3.2.2 Form and Scale

- Structures shall create transitions in form and scale between large buildings and adjacent smaller buildings.
- Building massing shall present a cluster of related forms with landscaped open areas as an integral part of the site plan, to create courtyards and plaza areas between buildings.
- Buildings shall terrace down to the river, to major streets, to major view corridors, and to open areas to maintain a comfortable scale relationship.
- Buildings shall be designed to create visual interest by varying form and facade to avoid monotonous block-like impact. Varying building levels and planes can create a visually satisfying structure and help define view corridors.

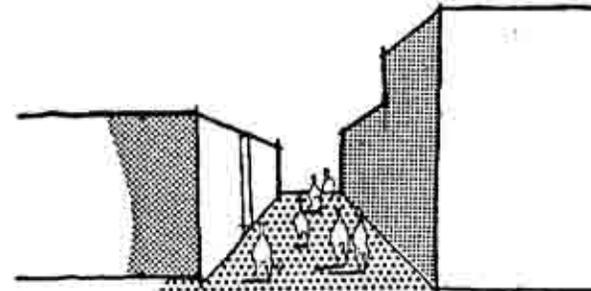


Wrong



Right

TERRACING DOWN TO VIEW CORRIDORS



Wrong



Right

VARYING FORM AND FACADE

3.2.3 Architectural Uses

- Parking garages shall be provided as an integral part of each new development, under or adjacent to each structure, thereby providing the most efficient and direct access. Ground-level spaces will be utilized for retail activity whenever feasible.
- Mid-rise and low-rise residential buildings shall make extensive use of balconies, decks, and roof terraces. Flat roof areas shall be designed for human use as terraces.
- Reflective glass shall not be used on building facades visible from the river and should not be used on buildings visible from the freeway.
- Safety lighting adjacent to the river corridor must be directed lighting as opposed to general lighting to prevent illumination of habitat areas.

3.3 OPEN SPACE NETWORK

To assure an open character within the project, major open space use areas will be created and linked to one another to form the Open Space Network, conceptually described in Figure 3.2. This open space network is defined in three parts:

River Open Space (40 acres) is composed of the San Diego River channel which will be designed and constructed to meet flood control requirements. See Flood Management, Section 4.2.

Recreational Open Space (11 acres) includes four park areas and the river buffer.

Landscape and Project Open Space (25 acres) includes building setbacks, theme entry areas, individual parcel open areas, pedestrian and bike paths within developed project areas, floodway transition areas, plazas, and the pedestrian bridge.

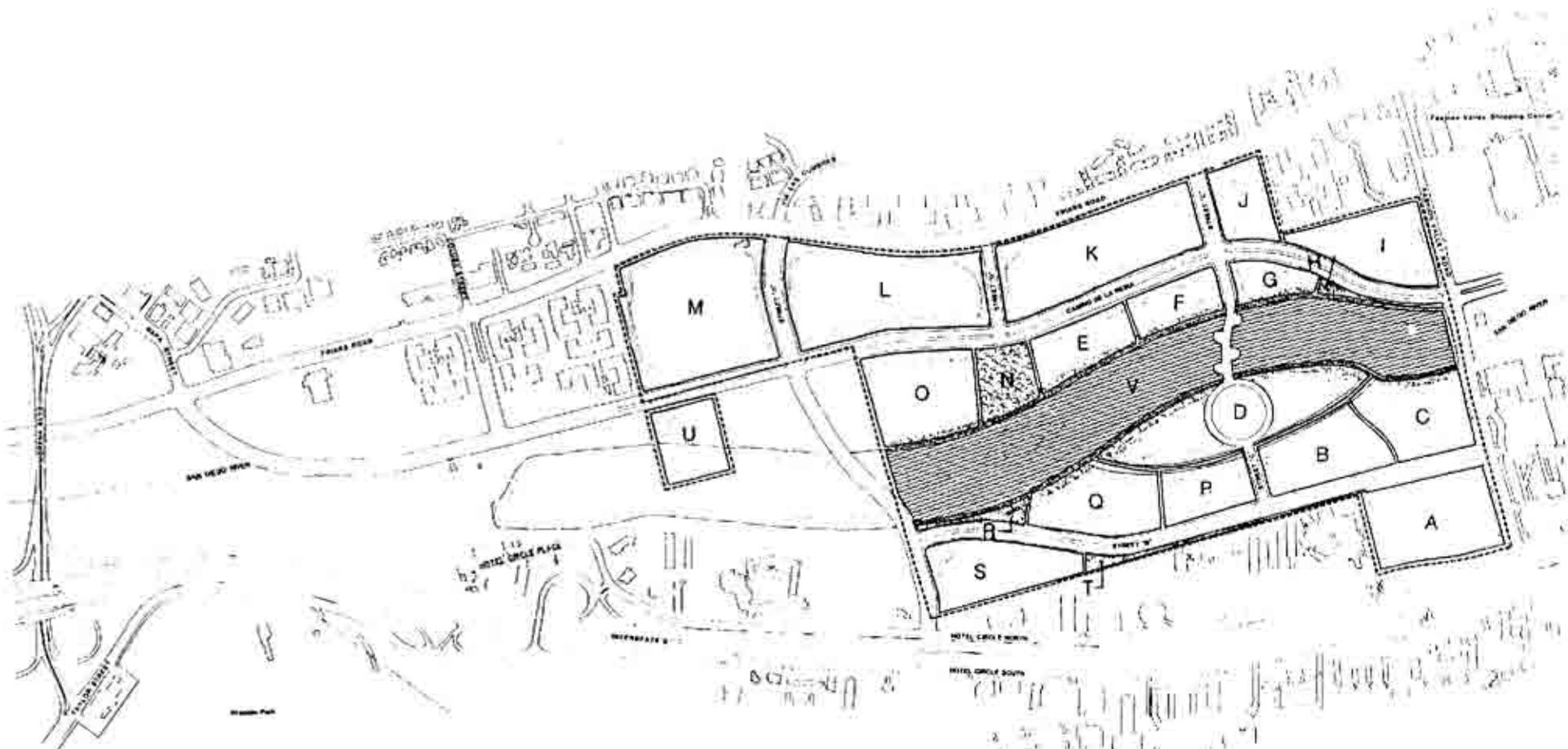
The landowner and/or project tenants will bear financial responsibility for constructing all elements of this open space network and assuring its maintenance in perpetuity. An open space easement will be granted to the City for River Open Space and a public access easement will be granted for Recreational Open Space.

Separate components of the Open Space Network are discussed below. Within individual parcels, the amount of open space is inversely proportional to the height of structures: the higher the structure, the greater the open space.

3.3.1 River Buffer

A continuous minimum 25-foot wide buffer area will be created along both sides of the river channel. It will always include a vegetative barrier and may include a pedestrian path, a bike path, landscaped areas, and passive recreational areas.

Flexibility in the design of the buffer shall be permitted to provide various use configurations. In no case, however, shall



LEGEND

-  RIVER OPEN SPACE (40 AC)
-  RECREATIONAL OPEN SPACE (11 AC)
-  RIVER BUFFER PARKS
-  LANDSCAPE / PROJECT OPEN SPACE (25 AC)
-  SETBACKS
-  THEME ENTRIES
-  PARCEL OPEN SPACE
-  PEDESTRIAN / BIKE PATH WITHIN PARCELS

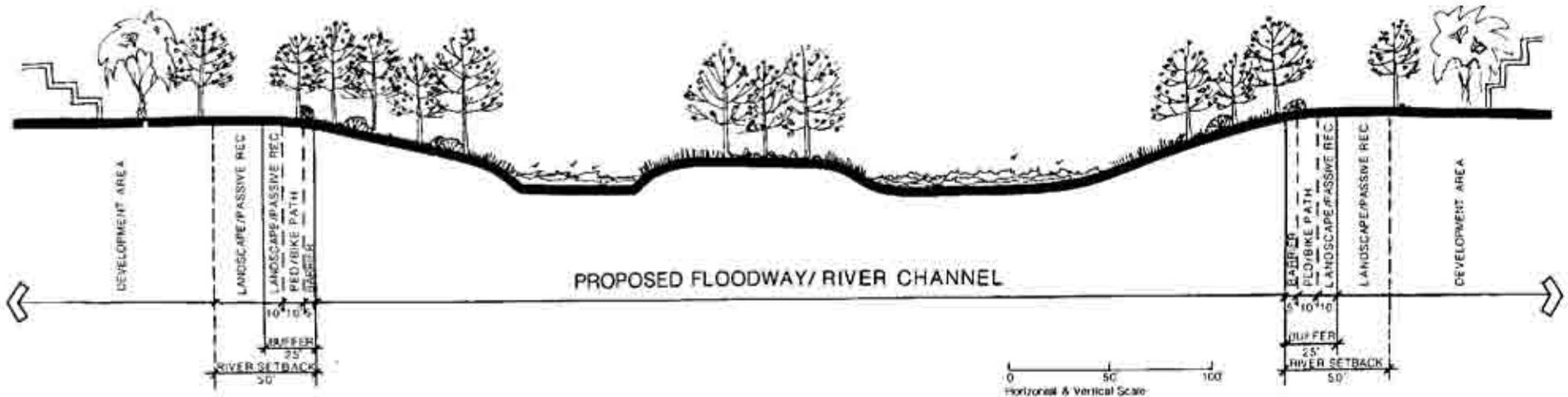
Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

FIGURE 3.2

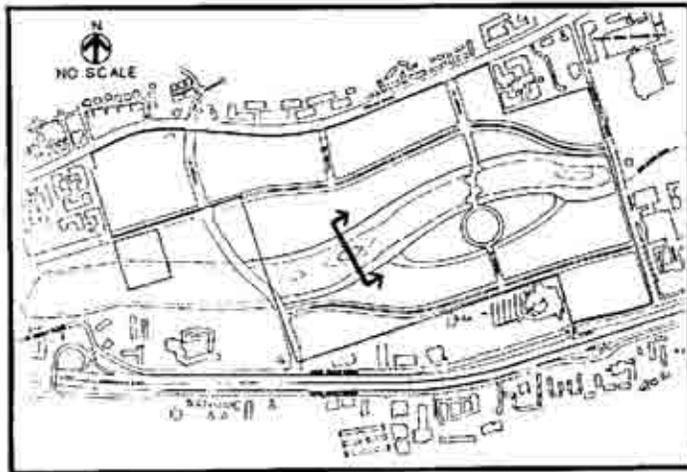
OPEN SPACE NETWORK

**LEVI - CUSHMAN
SPECIFIC PLAN**





RIVER CROSS SECTION (LOOKING EAST)



The river buffer is 25 feet wide and runs along both sides of the San Diego River. It always includes a vegetative barrier that is no less than the first 5 feet adjacent to the top of the channel. This vegetative barrier will be planted with shrubs and willows to physically restrict access to the river. The river buffer may also include passive recreation/view areas and a pedestrian and/or bicycle path. In no case, however, will the paved area devoted to a ped/bike path within the buffer exceed 10 feet in width.

Along most of the river, a building setback of 50 feet is imposed. While the first 25 feet will be used as the river buffer, it is expected that the remaining 25 feet will be designed to merge with and visually appear as an extension of the buffer. Landscaping will transition from the natives used in the vegetative barrier to ornamentals typical of the development area. Pedestrian and/or bike paths and passive recreational areas may be located in the buffer and in the setback area - or they can meander between the two.

The principal distinction between the buffer and the setback is that a public access easement is required for the former. A public access easement also must be provided specifically for the pedestrian and/or bike path within the buffer/setback area. See Figure 3.4, Typical Design Adjacent To The Buffer.

FIGURE 3.3

the paved portion of pedestrian and/or bike path within the 25-foot buffer exceed 10 feet in width.

Within the buffer, a vegetative barrier to prevent physical access to the river shall be planted along the entire river's edge. It will have a minimum width of 5 feet and a maximum understory height of 4 feet. In conformance with the MVCP, the barrier will be planted with native riparian species including thorny shrubs such as wild rose and blackberry, other native shrubs of the coastal scrub community, and native trees, particularly riparian woodland species. See On-Site Plant Matrix for a list of permitted barrier trees, shrubs, and ground cover.

Visual access through the vegetative barrier will be provided through overstory breaks along at least 20 percent of the river's edge and will be coordinated with view corridors. None of these breaks shall be more than 50 linear feet in length.

Breaks in the barrier will consist of areas with only low plantings (i.e., no trees, only low shrubs and ground cover) to allow pedestrians visual access to the river. Suggested locations are shown on Figure 3.11 by the view arrows located along the river.

- To the maximum extent feasible, trees presently located on site will be relocated or used in place to accelerate the sense of maturity of project landscaping.
- Within the first 20 feet of the buffer, as measured from the top of the river channel, only native plants may be used.

Uses Adjacent to the River Buffer

A 50-foot building setback from the river channel is required throughout the project, except on the island where the setback is 30-feet. While the first 25 feet of the setback will be used as the buffer, the remaining portion of the setback will frequently be designed to look as if it were actually part of the buffer. Pedestrian and/or bike paths can meander within the buffer and setback areas, and may include passive recreation/view areas and landscaping which transitions from the natives used near the river to the ornamentals typical of the development area.

The river buffer is designed to border the San Diego River channel. At the eastern end of the project, the floodway fans out adjacent to Fashion Valley Road (See Figure 4.4). Within this "transition area," no uses or permanent structures are permitted which would impede the flow of water during flood conditions and all uses are subject to review by the City Engineer for compliance with applicable flood control regulations.

Typical uses permitted within the transition areas include roads, theme entries, passive use areas, picnic areas, benches, view/rest areas, pathways, jogging trails, bikeways, nature trails, fitness courses, golf courses, and other passive recreation areas.

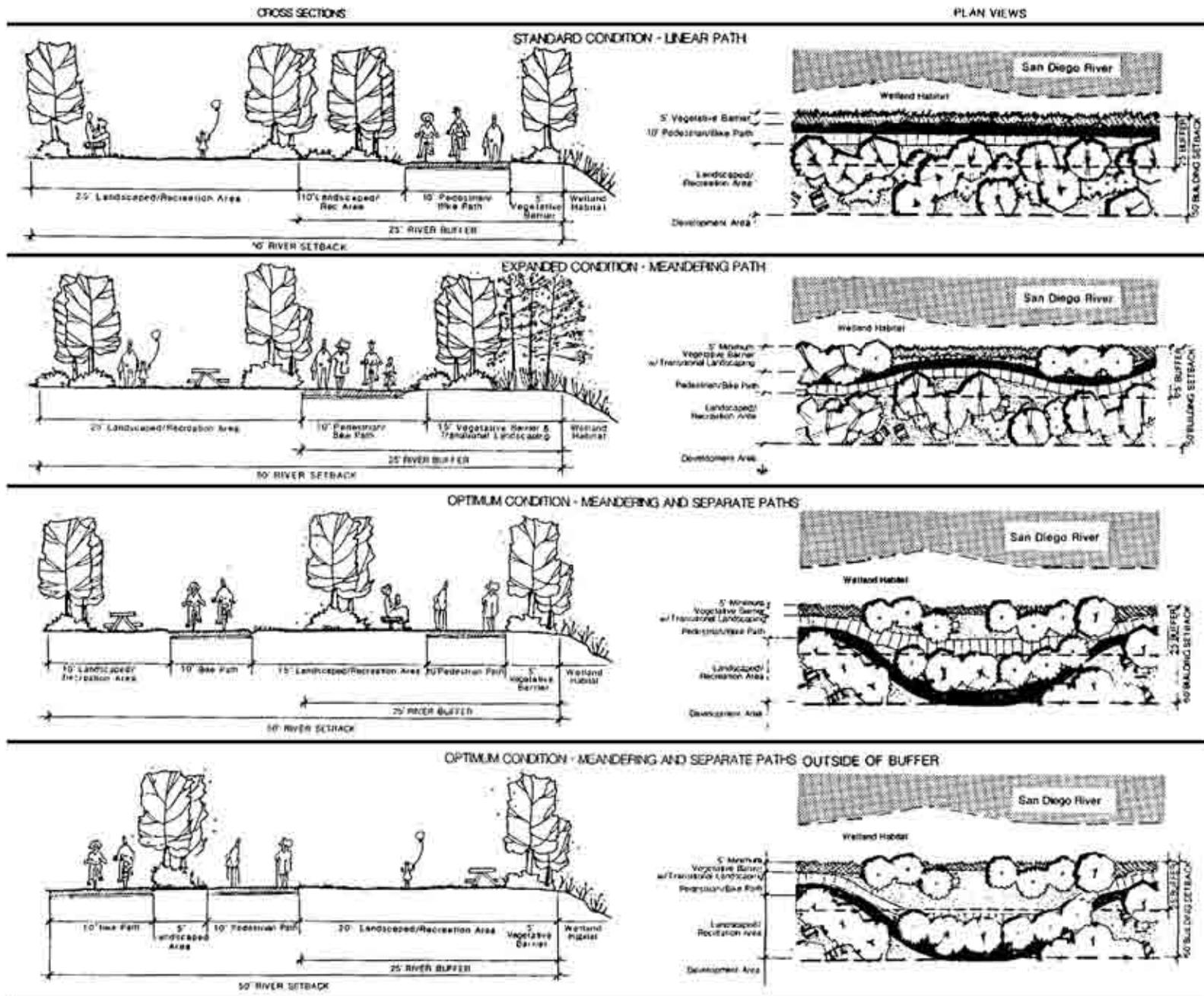


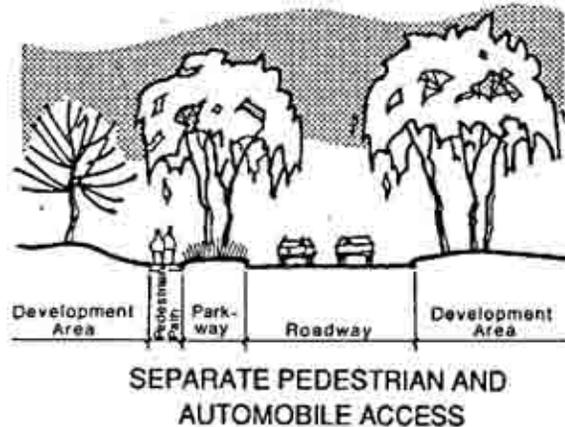
FIGURE 3.4

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SPECIFIC PLAN**

**TYPICAL DESIGNS
ADJACENT TO THE BUFFER**

3.3.2 Pedestrian Circulation

The entire project will be designed to accommodate foot-traffic, with linked pedestrian walkways, paths, and sidewalks to permit access from one part of the project to any other part (see Figure 3.5). A continuous pedestrian and/or bike path will be located on both sides of the river and will connect with



pedestrian/bike paths on property east and west of the site. Sidewalks will also connect to the community-wide pedestrian network.

The central bridge across the San Diego River will function not only as a pedestrian link from the transportation center to the island urban core but also as an active urban space

Pedestrian Pathways

- Widths of pedestrian paths located *within* a public street right-of-way shall be determined by the classification of

the adjacent street and shall be separated from the street by a landscaped strip.

- When adjacent to a major street, the pedestrian path shall be 10 feet wide and the landscaped strip 8 feet wide.

- When adjacent to a four lane collector street, the pedestrian path shall be 8 feet wide and the landscaped strip 6 feet wide.

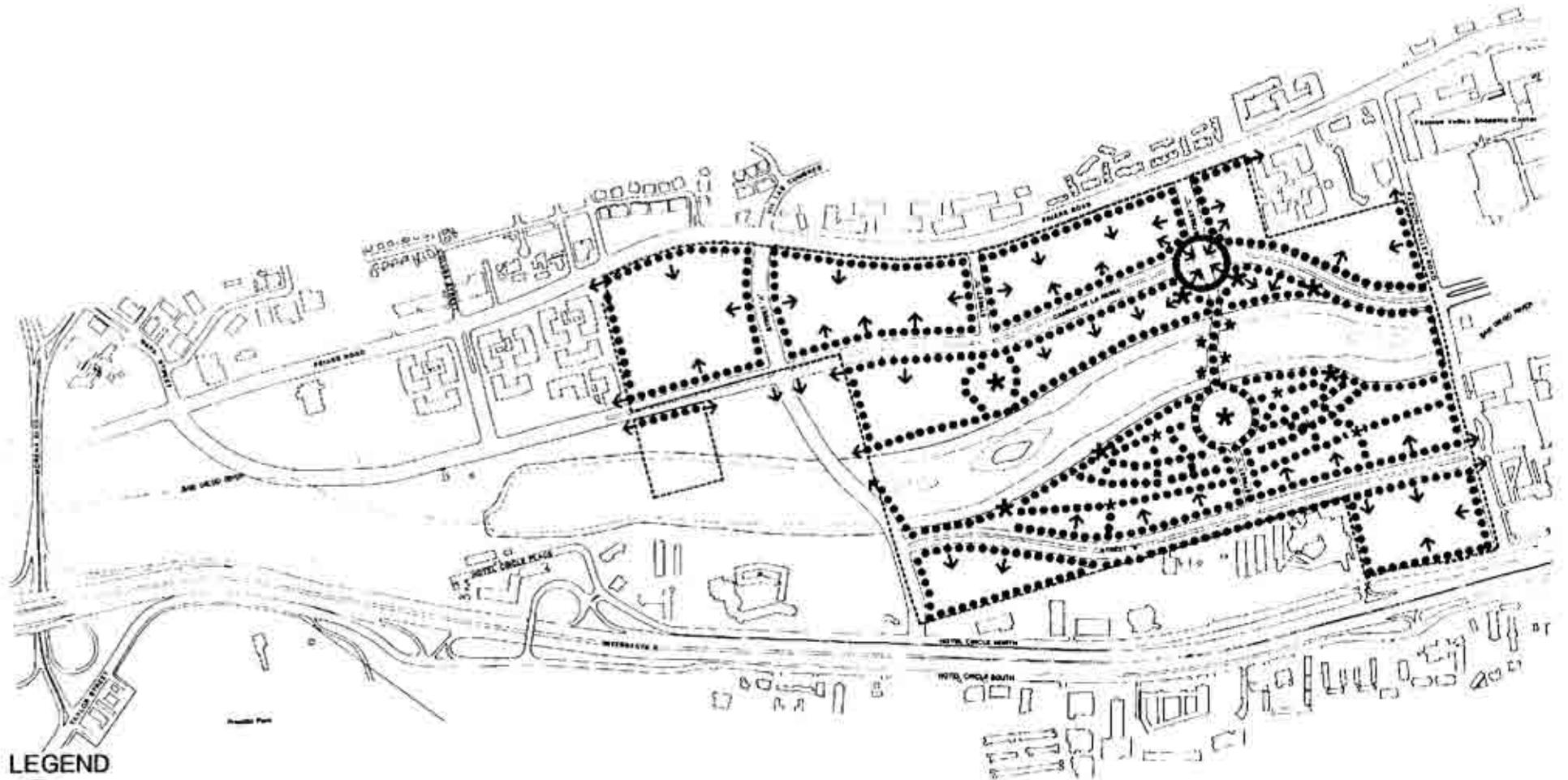
- When adjacent to a two lane street, the pedestrian path shall be 6 feet wide and the landscaped strip 5 feet wide.

- Widths of pedestrian paths which lie *outside* a public street right-of-way shall be no less than 6 feet wide except when they occur in the river buffer. While the pedestrian path along the river will be at least 10 feet wide, when it is located within the river buffer, the paved surface area must not exceed 10 feet in width.

- All pedestrian paths that are at least 10 feet wide shall be known as *primary* pedestrian paths.

- A primary pedestrian path shall run continuously along the San Diego River channel and be located within the required setback from the River.

- All primary pedestrian paths shall have adequate lighting and signing to provide for the safety of the users.



LEGEND

-  TRANSPORTATION CENTER
-  MAJOR PEDESTRIAN NODES
-  MINOR PEDESTRIAN NODES
-  PEDESTRIAN PATHS
-  CONTINUATION OF PEDESTRIAN PATH

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SPECIFIC PLAN**



When pedestrian paths are located within a public street right-of-way, the minimum width of the path is determined by the street classification. The pedestrian path is always separated from the street by a landscaped strip.

Classification	Width of Pedestrian Path	Width of Landscaped Strip
Major Street	10'	8'
Four Lane Collector	8'	6'
Two Lane Street	6'	5'

Pedestrian paths which lie outside a public street right-of-way must be no less than 6' wide, except when they occur in the River Buffer. While the pedestrian path along the river will be at least 10' wide, when it is located within the River Buffer, the paved surface area must not exceed 10' in width.

Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

FIGURE 3.5

**PEDESTRIAN
CIRCULATION
SYSTEM**

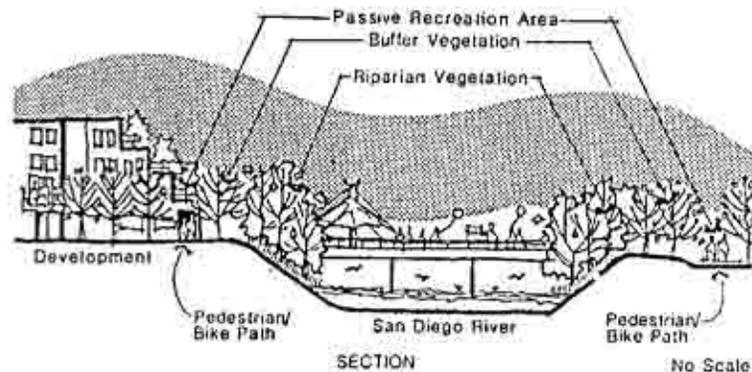
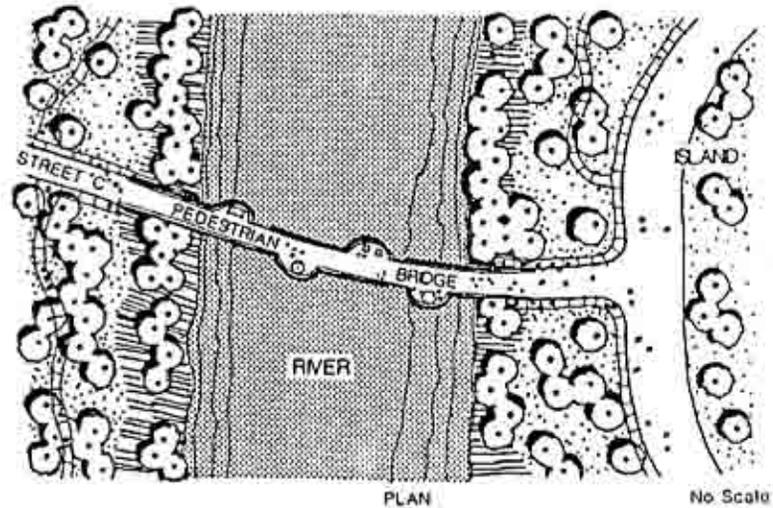
- All primary pedestrian paths shall have adequate gradients for handicap usage, per requirements of Title 24.

Desired Access

- Development oriented to the river shall have major pedestrian access from public streets, even in areas where parking lots are located between the building and the street.
- Separate internal circulation paths shall be provided to minimize conflicts between pedestrian, bicycle, and automobile traffic. In some instances, joint pedestrian and automobile access will be provided within the project.

Pedestrian Linkages

- Safe and convenient pedestrian movement shall be provided within, to, and from parking areas and also to surrounding projects and valley-wide pedestrian and public transit systems.
- Pedestrian paths located within the river buffer shall link to the community-wide trail system.
- The pedestrian path system shall connect recreational uses to one another and link recreational areas to all other use areas. Primary access to buildings fronting on the river shall not be from the pedestrian path within the buffer.



BRIDGE ACROSS THE SAN DIEGO RIVER

- All major residential, retail commercial, recreational commercial, and office commercial developments must have direct pedestrian links into adjacent open space parcels.

Pedestrian Crossings and Intersections

- On-grade street crossings shall be developed at major street intersections, designed in accordance with applicable City standards.
- Internal pedestrian paths may cross streets only at-grade at intersections and must have pavement markings such as patterned walkways, barriers, etc.
- Grade-separated pedestrian connections (bridges) would be permitted mid-block and may be appropriate between parcels or at streets to promote intra-project linkages. Connections should be designed to be safe and attractive and well integrated into the urban scene.

Pedestrian Bridge

The Street C bridge which spans the San Diego River shall function primarily as a pedestrian crossing, but also permit limited public transit and emergency vehicle access to the island.

- The traveled way of the pedestrian bridge shall not exceed a width of 30 feet.

- Four commercial nodes shall be planned adjacent to the traveled way of the bridge. These nodes are to be the site of temporary commercial stands and stalls intended to enliven bridge activity. Commercial nodes are not to add more than 20 feet to the traveled way of the bridge.

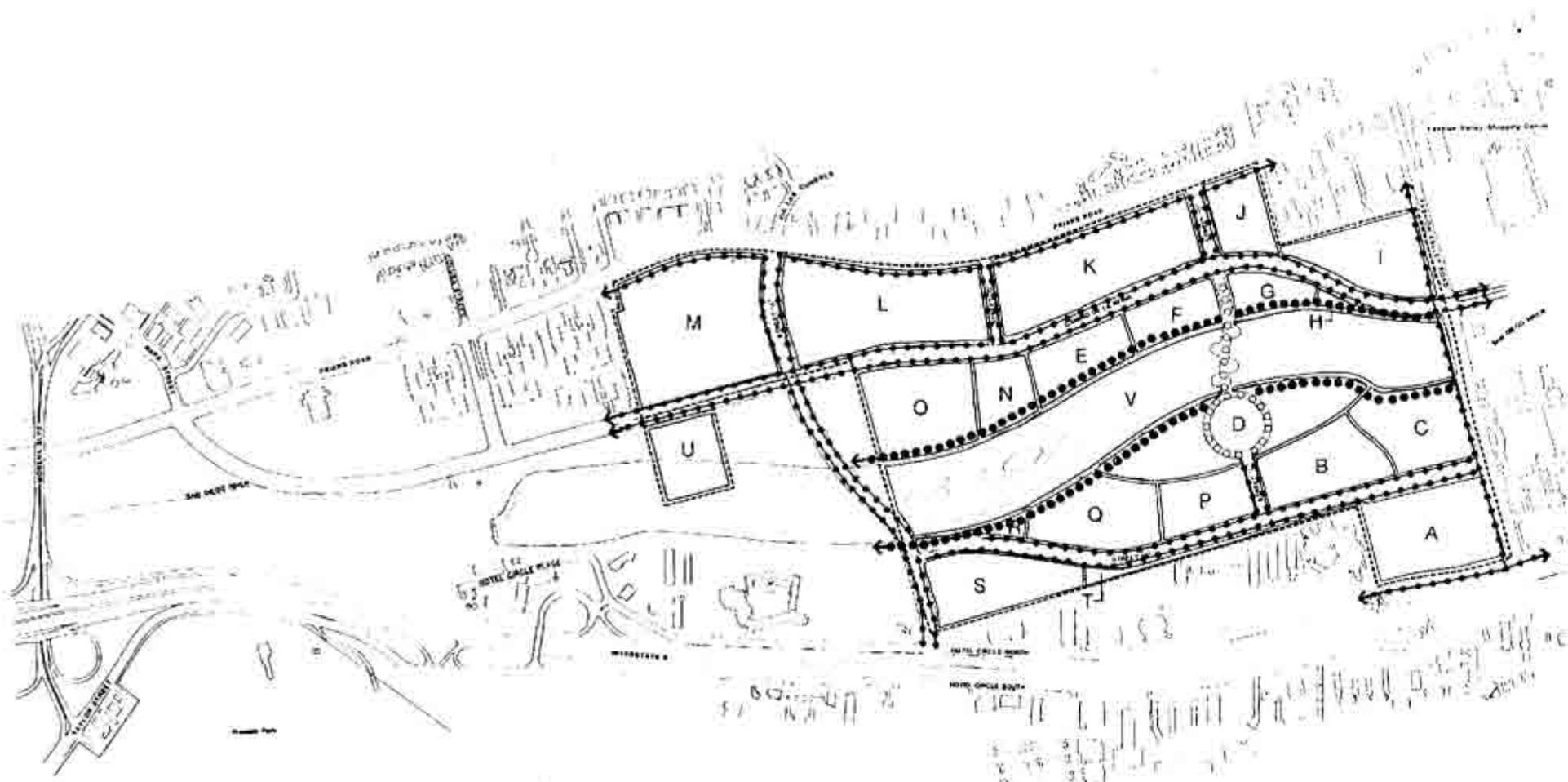
3.3.3 Bicycle Circulation

The primary bikeway system proposed for the LCSP area is shown in Figure 3.6. Bikeways will link retail commercial, residential, and open space areas within the project as well as to the community-wide bikeway system.

Because bicycle paths will connect with the city-wide system, a cyclist can ride through and then beyond the project. A variety of views and biking experiences will be provided along the bicycle system that encourage the rider to stop, relax, and browse before continuing on his/her journey.

(a) *Bicycle paths* are facilities separate from roadways used for two-way bicycle travel. They shall have a minimum width of eight feet. When merged with a primary pedestrian path, the combined width shall be a minimum of ten feet except when the ped/bicycle path occurs in the river buffer when its width shall be a maximum of ten feet. Bicycle paths shall conform to the Mission Valley Community Plan.

(b) *Bicycle lanes* are striped or marked lanes in the roadway designated for preferential one-way use. Bicycle lanes within the LCSP areas will be six feet wide and are proposed in Friars



LEGEND

BIKEWAYS

- BICYCLE PATHS
- - - - BICYCLE LANES
- o o o BICYCLE ROUTES

Note: Design of the bikeway system must conform with standards established by the Mission Valley Community Plan (1985).

**LEVI - CUSHMAN
SPECIFIC PLAN**



38 / LEVI-CUSHMAN SPECIFIC PLAN

Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

**FIGURE 3.6
BIKEWAYS**

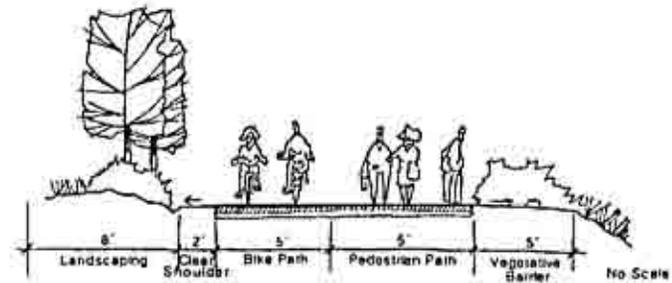
Road, Fashion Valley Road, Camino De La Reina, Street B, Street A, and Street D.

(c) *Bicycle routes* are signed bikeways shared with pedestrians or motor vehicles with no specially marked lane. Widths of routes vary based on vehicular traffic, road conditions, etc. Bicycle routes are proposed in the portions of Street C between Camino De La Reina and the south side of the canal to serve high-intensity uses such as the island center and other open space areas via the pedestrian bridge and island loop.

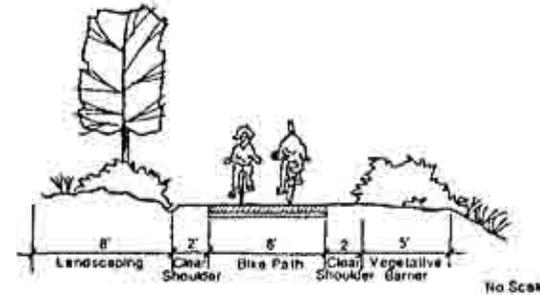
Additional bicycle access from project areas to the primary system must be accommodated on local streets and private roads, with no special lanes or signing.

Bikeway Design

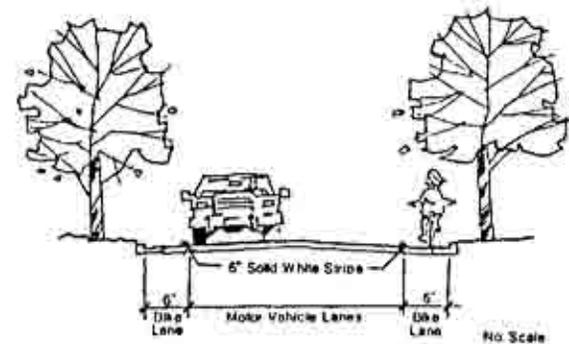
- A minimum two-foot horizontal and a minimum eight-foot vertical clearance to obstructions shall be provided at the outside edges of all bicycle paths. When a bicycle path is combined with a pedestrian path, the horizontal and vertical clearances are only necessary along one side of the path.
- Drainage inlet grates, manhole covers, etc., on all bikeways shall be designed and installed in a manner that provides an adequate surface for bicyclists.
- Uniform signs, markings, traffic control devices, etc., shall conform to the requirements of the "California Highway Design Manual," July 1983.



TWO-WAY BIKE/PEDESTRIAN PATH WITHIN THE BUFFER



TWO-WAY BIKE PATH ON SEPARATE ALIGNMENT



BIKE LANE MARKED IN ROADWAY

TYPICAL BIKEWAY CROSS SECTIONS

- All bikeways shall have adequate lighting and signing to provide for the safety of the users as determined by the City Engineer.
- Commercial and residential buildings shall provide secure bike racks to encourage bicycle use.

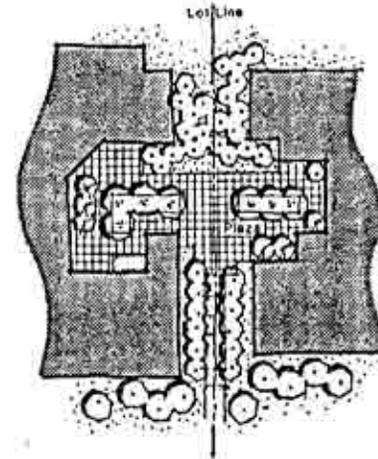
Lockers, showers, and changing facilities shall be encouraged at major developments in order to promote the use of bicycles and bikeways by employees.

3.3.4 Project Open Space

Project open space is any privately constructed and maintained outdoor space articulated for human use and/or relaxation. It includes but is not limited to courtyards, plazas, promenades, seating areas, recreational areas, parks, viewing areas, pathways, trails, children's play areas, and picnic areas. Project open space must occupy at least 10 percent of each parcel, exclusive of buffer area.

Shared development of project open space areas between adjacent parcels is encouraged.

- Usable open spaces such as mini-plazas shall be created between buildings to avoid a visual tunnel effect and should be linked to major open space areas.
- Private recreational and urban plaza areas shall be visually (through unobstructed views) and/or physically



USABLE OUTDOOR SPACES
CREATED BETWEEN BUILDINGS

(through pathways) linked to open spaces as part of the area-wide open space system.

- Recreation uses shall be provided within private developments and may include swimming pools; tennis, basketball, volleyball, handball, shuffleboard, and badminton courts; children's play areas; and picnic facilities.

3.4 SITE PLANNING AND VIEW CORRIDORS

A major urban design feature of the LCSP is the 12-acre island and theme structure proposed for the island. The theme tower, an exception to the rule that all tall structures be located away from the center of the project, is expected to be similar in character to structures like the Seattle Space Needle. Its height may exceed the 250-foot project maximum, although that determination will be made at the time the theme tower design is submitted for PCD approval. The tower will be a

focal point for the entire project and serve as a landmark to give orientation for direction and distance.

Because of the variety of parcel sizes and uses throughout the project, special attention must be given to the siting of each structure.

In site planning for the project, considerable emphasis is placed on establishing view corridors both within the specific plan area and also into the site from adjacent roadways. These views are as seen from automobiles and by pedestrians at the street level. These are the most critical view corridors due to the pedestrian orientation of the site. Availability of views from I-8 cannot be known at this time, due to the uncertainty of the character of development between the freeway and the LCSP area, but an attempt will be made to provide a view from I-8 into the river through Parcels A and B, C or D. Views into the site will still exist from the hillsides above Friars Road and above I-8, but these views will be primarily from private development areas. View corridors as seen from structures into the river corridor are also shown in Figure 3.7. View corridors will occur from Friars Road through Parcels L, K and O, E or F, to the river.

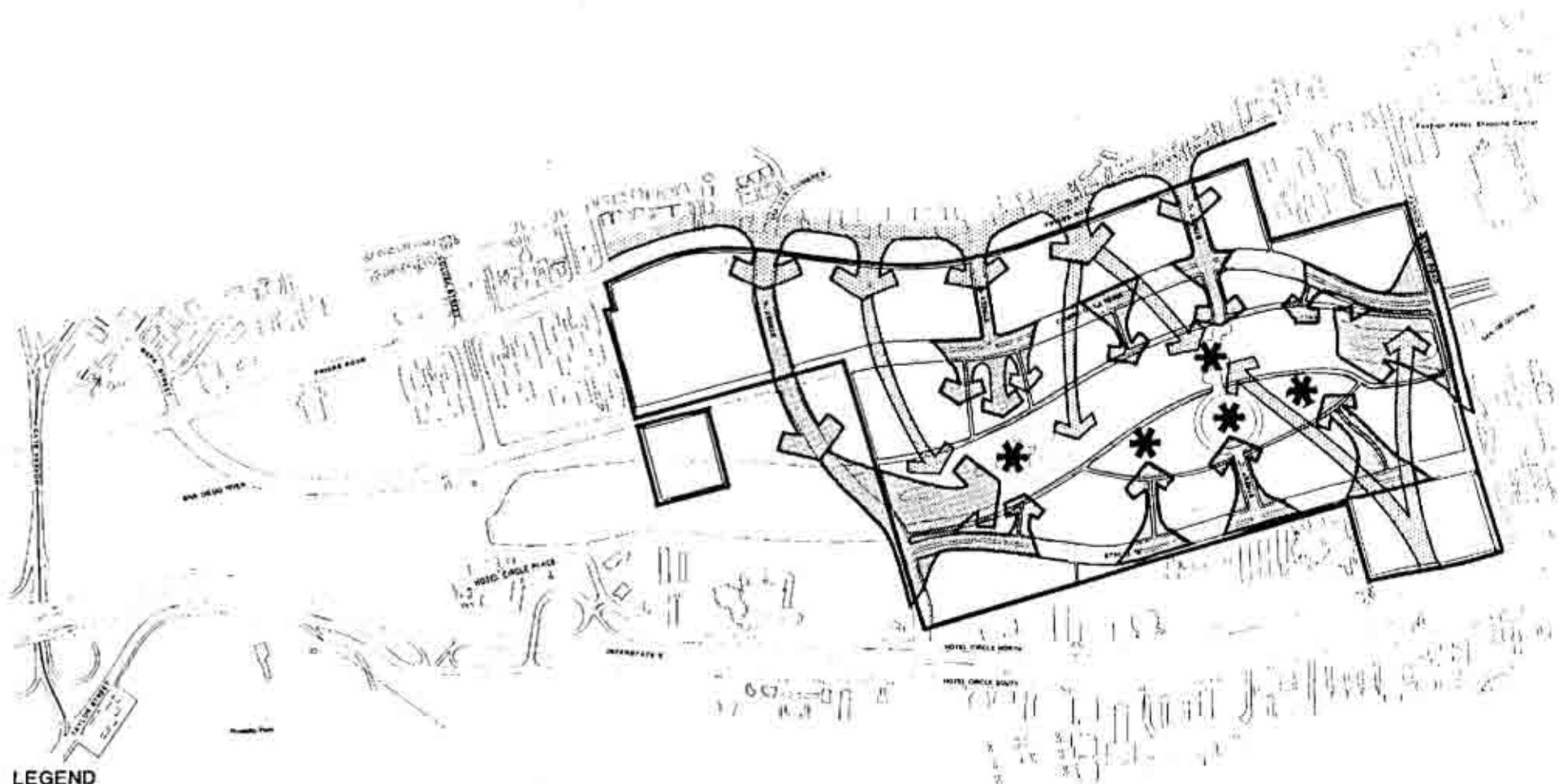
Large plazas and courts within the project are expected to have visual "terminations" such as sculpture and/or other art, the theme tower, special buildings, and landscape forms. The addition of water features such as pools, fountains, and artificial streams should also be utilized to provide visual focal points. These water features will be used to integrate the river with

the proposed development by carrying the river corridor feeling through to the interior.

Buildings must reflect the visual corridor objectives by organizing in a pattern which emphasizes these focal points. Providing interior view opportunities will define the urban character of the project through a variety of spaces linked by walkways and plazas, and then articulated by overhead structures and bridges which frame views and create a changing spatial experience for pedestrians.

Site Planning

- Tall buildings shall be located north of outdoor plaza areas, wherever possible, to maximize sun in the plazas. The most successful outdoor plaza spaces are usually found to the south and west of high-rise structures.
- Buildings shall be oriented to make the most efficient use of a site, provide landscaped open areas for human use, and preserve view corridors to the river.
- Buildings shall be designed and developed with heavily landscaped, park-like terraces and roofscapes.
- Buildings shall be sited to consider internal views to the river as well as views looking outward from the site.



LEGEND



VIEWS INTO THE SITE



MAJOR VIEW CORRIDORS WITHIN THE SITE



VIEW CORRIDOR TERMINUS

OVERVIEWS CREATED THROUGH THE PROJECT BASED ON TERRACING OF HEIGHTS REFER TO FIGURE 3.1

**LEVI - CUSHMAN
SPECIFIC PLAN**



NOTE: SEE INDIVIDUAL PARCEL MAPS FOR VIEW CORRIDOR REQUIREMENTS.

Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

FIGURE 3.7

VIEW CORRIDORS

Views and View Corridors

- Views to and from the residential and commercial portions of the LCSP area to the rest of Mission Valley and the San Diego River shall be maximized.
- Views into the project from major local streets and the hillsides above Friars Road shall be provided into the site.
- Views from Fashion Valley Road, Camino De La Reina, and Street A to the theme tower and the island development shall be created.
- At least two view corridors shall be created from Friars Road to the river which provide views through Parcels L and K.
- Ground-level view corridors shall be provided from public streets. This will require that space between buildings be developed into landscaped links to the major open space areas.
- To maintain views to and across the river, building heights shall generally be lower adjacent to the river, then stepping up as they move away from the river corridor.
- Roof areas of large low-rise buildings which can be seen from above shall be designed to enclose mechanical equipment and use color, pattern, roof forms, materials, and plantings to have a positive visual impact.

3.5 CIRCULATION

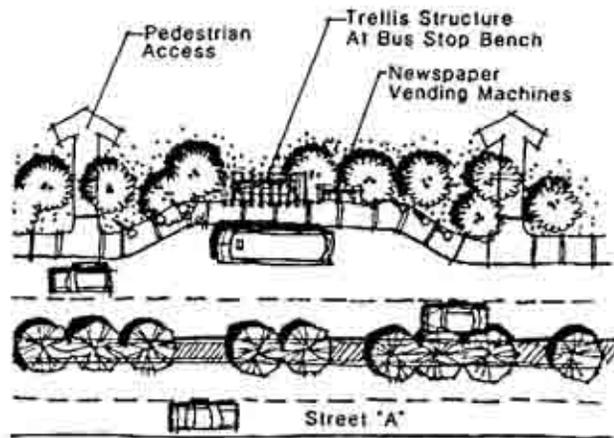
Within and adjacent to the LCSP project area, goods and people will move via light-rail transit, bus, automobile, truck, mini-bus (jitney), bicycle, and by foot. An integrated circulation system is critical to the success of the project and design objectives have been prepared to foster coordination among the system elements. Background to the circulation system is in Section 5.0.

3.5.1 Public Transportation

Light-rail transit (LRT) is incorporated in the plan following a generally east-west alignment in the median of Camino De La Reina. The exact alignment will be determined by the Metropolitan Transit Development Board.

- The LRT right-of-way will be reserved for 15 years at the time of recordation of the first final map in Development Area 2. An extension period of up to 5 years will be provided if the LRT is not constructed within the 15-year period and it is shown that substantial progress on implementation has been made.
- A below-grade LRT stop is proposed within a transportation center located at the intersection of Parcels F, G, J, and K. Auto traffic will be carried on an overpass of Street C. The transportation center will be integrated into the architectural design of the multi-use developments on those parcels.

- The plaza area located at the depressed LRT level shall incorporate landscaping, newsstands, kiosks, ticket booths, etc.
- Direct pedestrian walks from transit stops (bus or LRT) shall be provided to high activity areas where there is a concentration of commercial, office, parking, or recreation.
- Access from the LRT station to the project will be achieved through the use of portals, amphitheater-effect steps and ramps, ramped plazas, or all of these.
- In order to facilitate pedestrian movement, strong relationships shall be established between high activity parcels, such as those incorporating retail and office use, and tran-



TYPICAL BUS STOP PLAN

sit stops. Considerations include reasonable walking distances, tree-shaded walks, etc.

Friars Road will be used as the major bus and/or shuttle route serving the project area.

- Bus stops shall be integrated with buildings, pedestrian areas, urban plazas, LRT, and shuttle bus service to provide easy pedestrian access from bus stop to destination. Bus stops shall be provided as required by MTDB.
- Outdoor bus stops shall be designed to provide shelter from harsh weather.
- Bus stops shall be properly signed to be readily identifiable to pedestrian and bus passengers.
- Bus stops shall be designed to maximize security features and be located close to traffic signals and pedestrian crosswalks.
- The proposed bus and/or shuttle route to serve the project area should be part of the Mission Valley intra-valley shuttle service.

3.5.2 Automobile/Truck Circulation

Three automobile/truck circulation systems will be constructed in accordance with City standards within the project: public, service, and emergency systems. The public and service systems consist primarily of vans, autos, and service

trucks. The emergency system deals with fire, police, and ambulance vehicles. Public streets will be designed to accommodate use by all such vehicles.

Objectives to be achieved in the design of the vehicular circulation system include:

Vehicular Considerations

- When feasible, vehicular access should be provided through shared driveways at property lines.
- Emergency services vehicles (i.e., police, fire, and ambulance) shall have complete access to all structures within the project area as required by the City of San Diego safety codes.
- Driveway entrances to parking areas should minimize disturbances to the pedestrian continuity of the sidewalk areas.

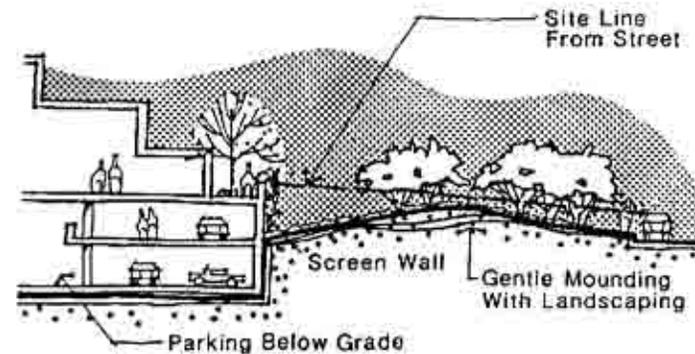
Parking Requirements and Ratios

- On-street parking will be prohibited.
- At least 75 percent of all parking required for a project will be accommodated in architecturally-integrated parking structures.
- At least 50 percent of the parking required for the island shall be met by garages off the island.

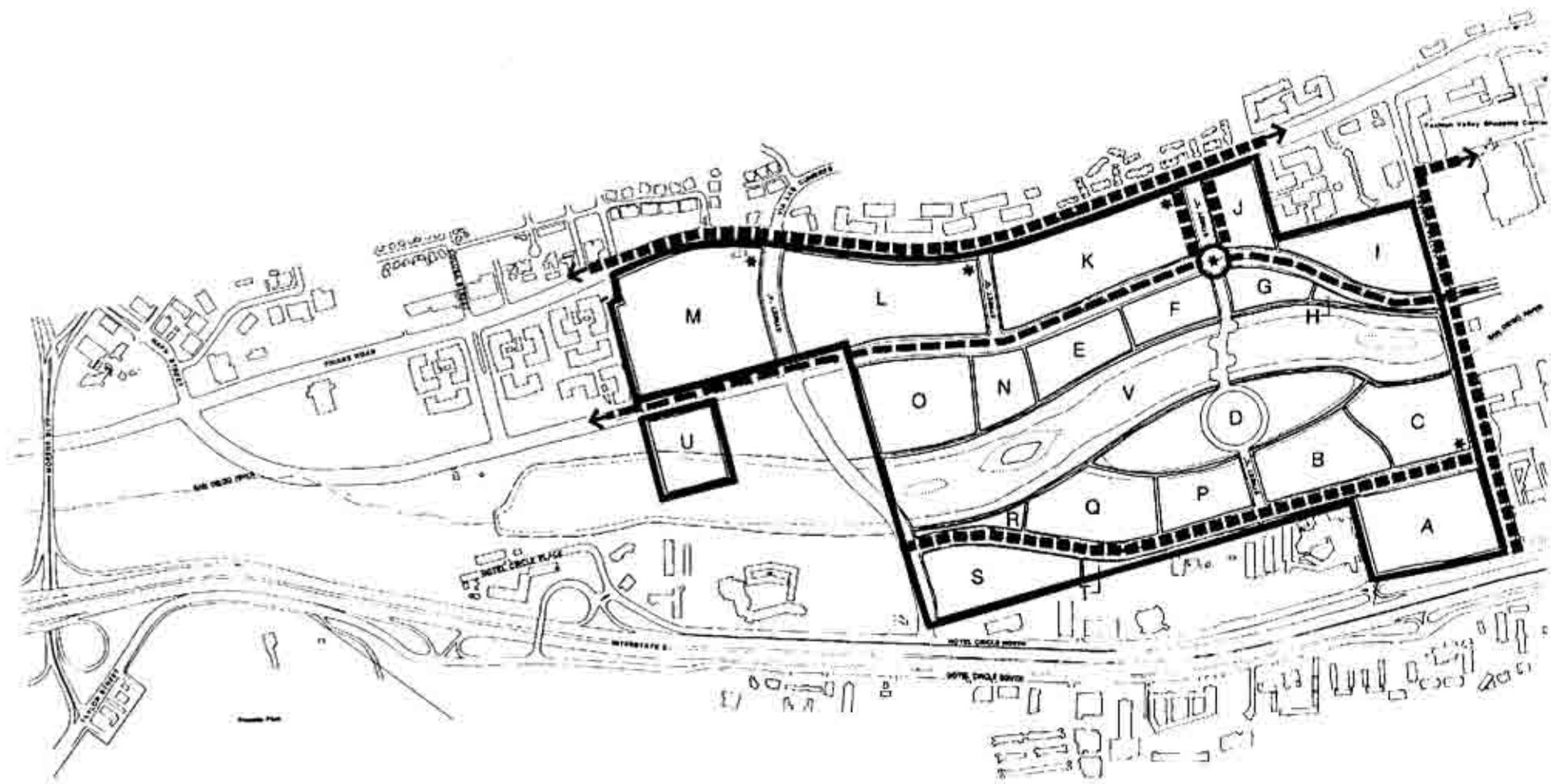
- Consolidated parking areas, as proposed within the Mission Valley Community Plan, shall be developed within the LCSP area.
- Parking requirements will be established based on uses shown within each PRD or PCD.
- Parking shall not be permitted on roof surfaces, including the roof of parking structures.

Parking Design Criteria

- Parking structures should be placed below grade and between or under buildings to reduce the visual prominence devoted to parking.



PARKING AREAS PLACED BELOW GRADE



LEGEND

- ★ RECOMMENDED BUS STOPS
- TRANSPORTATION CENTER
- ▬▬▬ BUS ROUTES
- ▬▬ LRT ROUTE

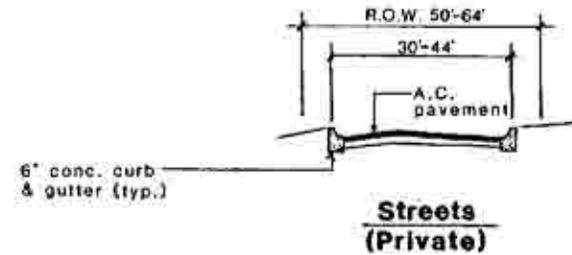
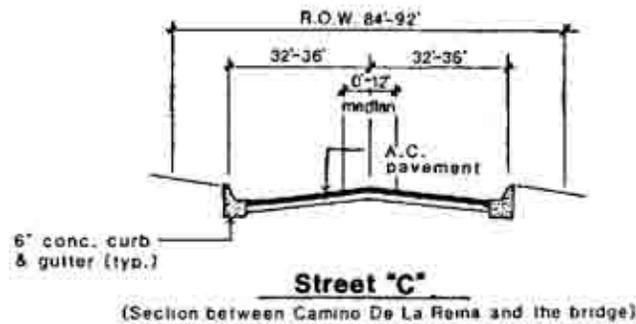
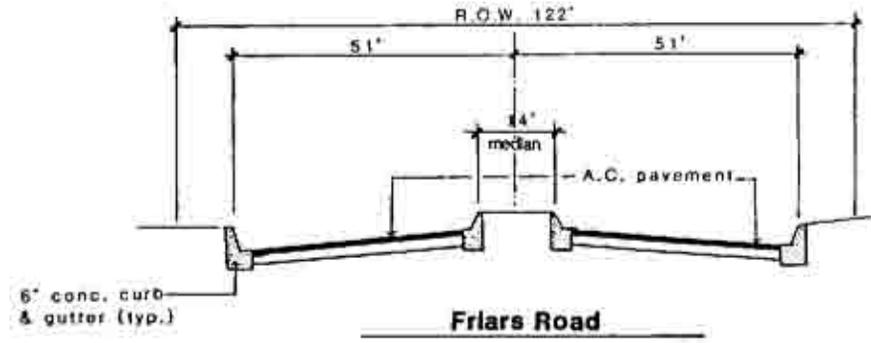
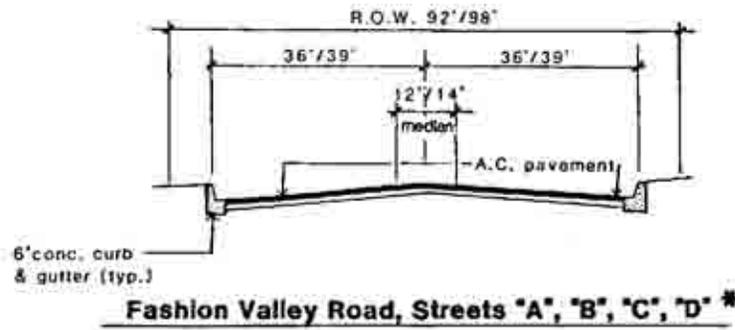
Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

**LEVI - CUSHMAN
SPECIFIC PLAN**



FIGURE 3.9

MASS TRANSIT



Note: Bike lane widths are not included in street dimensions and allowance must be added wherever bike lanes must be included within the street pavement area.

Requirements for sidewalk widths, landscaped medians, and parkway strips are specified within the Implementation Guidelines.

* For Camino De La Reina and pavement edge treatment see Figure 2.3.

- Parking areas shall not be located adjacent to the river corridor nor shall surface parking areas be visible from the river corridor.
- Parking areas shall be interconnected when possible in order to minimize the use of public streets by people looking for a parking place.
- Parking facilities shall be designed in consideration of future land use expansion. Initial parking facilities could be interim-use surface lots capable of eventually accommodating parking structures. Surface lots could also reserve land for future development. Landscape and buffering requirements for interim-use lots will be the same as for permanent lots.
- Large exposed parking areas shall be depressed, screened, and/or bermed to reduce their visibility.
- Large parking areas will generally feed off internal project streets rather than a public street area. This simplifies ingress and egress and provides drive up and drop off access.
- The use of public rights-of-way for the loading and unloading of goods will be discouraged by providing adequate delivery areas. Off-street loading and unloading bays shall be provided for commercial and retail developments.

3.6 STREETScape ELEMENTS

"Streetscape" involves the paving, street furniture, plantings, structures, and buildings associated with public or private streets. The total effect of these physical elements creates a built environment that strongly influences the activities taking place within the street area.

Streetscape is perceived from three basic levels: pedestrian/bicyclist, vehicular, and structure. Speed of travel distinguishes pedestrian from bicyclists and from vehicular streetscape; elevation differentiates perception from that at ground level. The elements of the streetscape perceived from the above levels consist of:

(a) Street furniture which comforts, services, and directs: fire hydrants; phone kiosks and booths; bicycle racks; newspaper racks; planters; tables; trash bins; bollards; seats/benches; railings; balustrades; tree guards; and drinking fountains.

(b) Spatial, visual, and coverage elements are the major elements utilized to create outdoor spaces: plantings; overhead structures; topography; and visual or functional components.

(c) Surfaces include paving (used as focus, accent, interface, edge); tree grates; and utility covers.

(d) Controls include light standards; stop lights; parking signs; and traffic bollards.

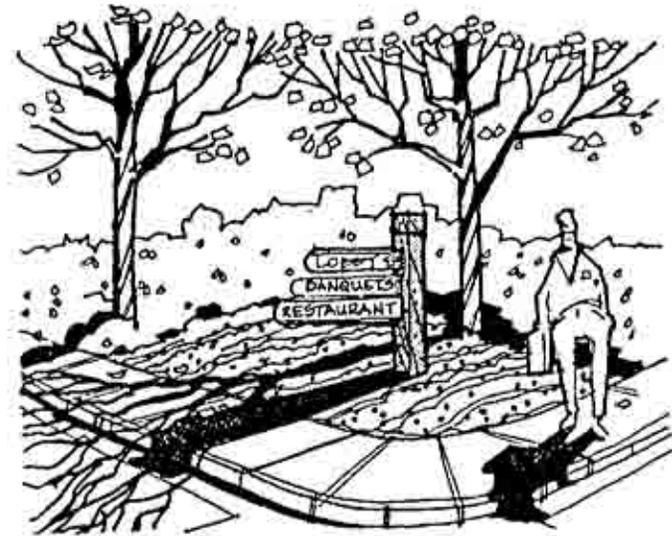
(e) Graphics include directional, informational, and traffic control signage; art; and sculpture.

(f) Architectural elements include space articulation; forms and shapes; transitions in form and scale; indoor and outdoor relationships; visual connections; and adjacent styles.

Objectives to be achieved in the development of the streetscape include the following:

- Provide a visually pleasing, harmonious, and secure environment for private investment.
- Enhance major views.
- Complement adjacent uses through the scale and character of the street scene.
- Locate transportation nodes conveniently to effectively move pedestrians, goods, and vehicles throughout the area.
- Improve the quality of the environment by incorporating water features into the street scene.
- Arrange centers or groupings of activities to facilitate access and minimize conflicts between them.
- Provide a pedestrian network that includes spatial and design qualities that allow the pedestrian to feel that the space was created for him.
- Create an indoor/outdoor relationship between major interior spaces and major outdoor spaces or streetscape.
- Provide an integrated vehicular transportation and pedestrian circulation system with minimal conflicts between systems (vehicular, pedestrian, service, and transit).
- Provide focal points.
- Provide lighting that respects the functions and hierarchies of various street and activity centers.
- Design fire hydrants to have a trim sculptured look, clearly visible, but not obtrusive (no yellow color).
- Construct benches to be warm, inviting, vandal-resistant, and contoured for human comfort. No advertising should be allowed on them.
- Install trash receptacles throughout, including bus shelters.
- Integrate public telephones into the street scene and locate on or adjacent to a structure.
- Provide traffic signal structures which are compatible with the adjacent street furniture.
- Allow newspaper vending machines only in groups of uniformly designed units and locate in logical areas such as bus stops and near hotel lobbies.

- Utilize bollards as a safety separation between vehicles and pedestrians.
- Locate carefully items such as mailboxes; fire-call boxes; traffic speed and directional signs; traffic signal boxes; and electrical transformers. Coordinate materials and color within the streetscape.
- Create inconspicuous or concealed accent lighting, wherever used.
- Provide barrier-free design amenities for the handicapped.
- Provide for group and individual social interaction.
- Provide streetscape elements to support public events, food vendors, sidewalk cafes, and street entertainment.

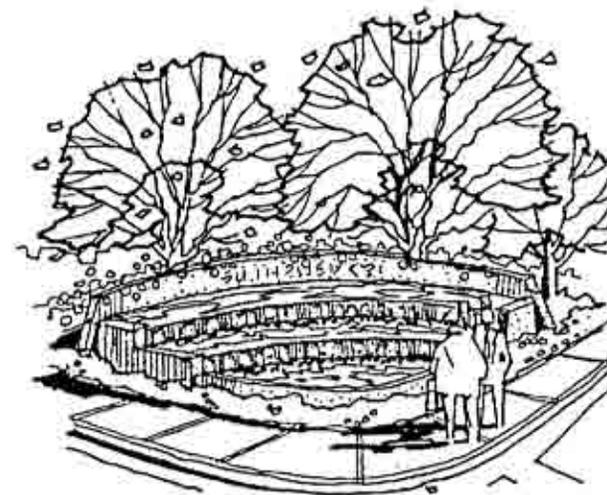


TYPICAL DIRECTIONAL SIGN

Signage

All signage and graphics for the Levi-Cushman Specific Plan shall conform to city codes. Objectives to be achieved in the development of street signage and graphics include:

- Coordinate all graphics (sign design and sign location) for public signing within the project. Assure consistency relative to type, style, form, color, and materials. Sign sizes should relate to the other design elements of the project.
- Maintain the proper scale and character of all street signs and graphics with adjacent buildings. Sign sizes should



THEME ENTRY MONUMENT

be subdued relative to the other design elements of the project and have simple forms and shapes.

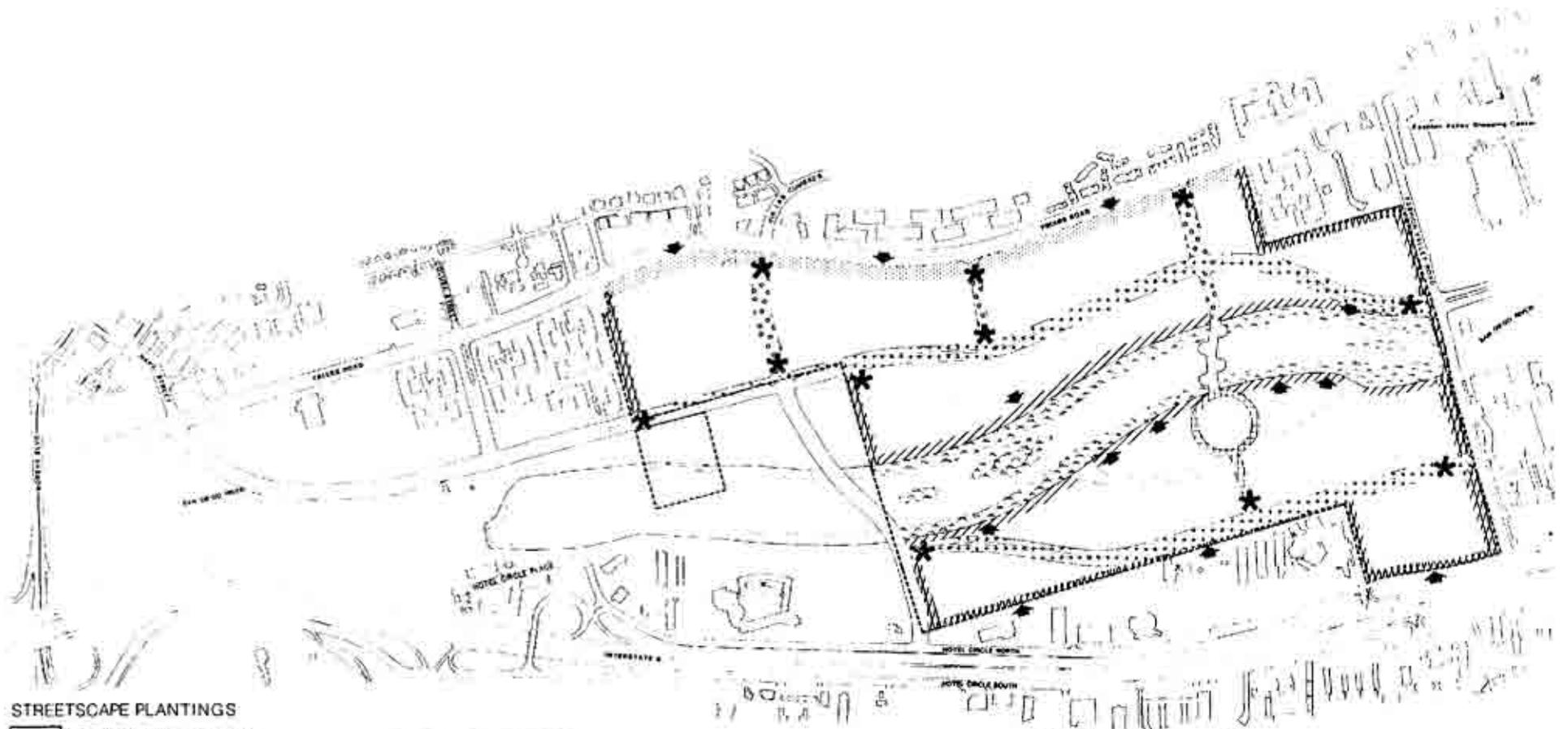
- Individual rather than multiple sign supports should be utilized, especially for major identification signs. Supports should be black, dark brown, or other dark flat colors to minimize visibility.
- Information should be located on a single sign rather than utilizing multiple signs.
- Coordinate graphics of street signing within the project area (in the design of the signs themselves and in their location). Sign locations should be prominent in order to establish a clear directional identification.
- Coordinate private development signing for directional signing, identifying entrances, etc., with consistency of the urban theme throughout the project.
- Emphasize the use of logo designs in building identification signs.
- Limit the amount of information bits occurring on any one sign.
- Minimize the number of colors utilized in any one sign. Use light or dark letters on a solid contrasting background.
- Limit freestanding signs to have a maximum size of 150 square feet.

- Prohibit signage immediately upon the top or roof of any structure.
- Prohibit flashing signs, stroboscopic, rotary beacon, chasing lights, or zip light sources.

3.7 LANDSCAPE DESIGN

Landscaping is of major importance in establishing the design character of the specific plan area and will promote continuity and compatibility throughout the project. These guidelines provide for a well maintained and organized appearance in areas not covered by buildings or parking; enhancement and preservation of existing site character; minimization of adverse visual and environmental impacts; and promotion of water conservation. The Conceptual Landscape Plan, Figure 3.11, illustrates the recommendations for the most visible areas of the development. Street trees, shrubs, and ground covers for public rights-of-way and theme entrances are to be taken from the Streetscape Plant Matrix. All other trees, shrubs, and ground covers are to be taken from the On-Site Plant Matrix, including plants for private development areas and the vegetative barrier. All landscape design must satisfy at least the minimum requirements of Chapter X, Article 1, Division 7, of the San Diego Municipal Code entitled "City-Wide Landscape Regulations," its technical supplement, and landscape standards of the Mission Valley Community Plan.

There are three distinctive "theme entry" situations within the LCSP site: major theme entries, secondary theme entries, and minor theme entries, Figure 3.12. A distinctive hierarchy in



STREETSCAPE PLANTINGS

-  FRIARS ROAD THEME TREE
-  EVERGREEN
-  FLOWERING TREE
-  TALL PALM TREES
-  ORNAMENTAL ENTRANCE PLANTING

RIVER CORRIDOR PLANTINGS

-  RIPARIAN VEGETATION
-  BUFFER VEGETATION

-  OVERSTORY SCREEN BREAK FOR VIEWS
-  SCREEN PLANTING

NOTE: SEE STREETSCAPE AND ON-STREET PLANT MANIFESTO

Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

FIGURE 3.11



the design of these entries must be achieved sensitive treatment of the landscape, water features, and monuments.

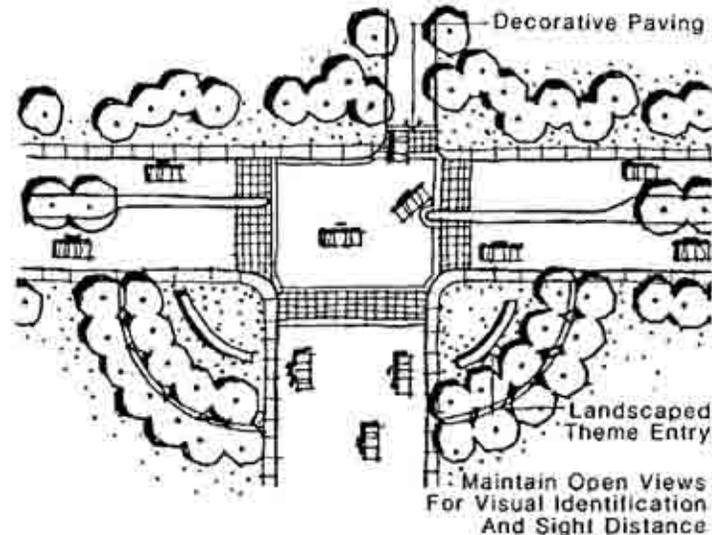
3.7.1 Streetscape

General design criteria pertaining to streetscape character within the LCSP area will be found in the preceding section, Section 3.6. The information within this section is specific to Landscape Design. All street trees will be derived from the Streetscape Plant Matrix, Table 3.1, and must be used in accordance with Figure 3.11, Conceptual Landscape Plan.

Streetscape Design

- Street trees shall be long-lived (60 years or more), strong, insect and disease resistant, deep-rooted, tolerant of street environments, low-maintenance, and low-water-use, if possible. To avoid a monoculture of trees and to promote a street hierarchy:
 - Medians and rights-of-way of all east-west collector streets will be of one tree type.
 - Medians and rights-of-ways of all north-south collector streets will be of one tree type different from that of the east-west streets.
- Rights-of-way on all residential access roads will be of one tree type different from that of east-west or north-south collector streets.

- Rights-of-way on the circular island road (Street C) will be of one tree type.
- To maintain vehicular sight distances and public safety, trees shall not be planted within 25 feet of any intersection nor within 10 feet of streetlights, fire hydrants, and driveways.
- Trees and other plants shall be the dominant elements of the major entry statements.
- Plantings designed for major entries must relate directly to adjacent plantings as well as provide a strong focal element. If an entry monument or sign is used, evergreen



TYPICAL LANDSCAPING AT MAJOR INTERSECTIONS

shrubs and vines shall be used as a backdrop to soften edges. Low plantings of ground cover or annual color can be used in the foreground.

The plant use and selection matrix has been prepared for inclusion into the LCSP streetscape scene. The variety of tree materials has purposefully been kept short to maintain continuity throughout the project. A single species will be chosen for each street.

Existing Trees

Existing on-site tree specimens will be analyzed on an individual basis for preservation in their present or in a new location. Efforts will be made to retain specimen trees.

3.7.2 Setbacks

The setback area between public streets and the buildable parcel area will be fully landscaped except for driveways, urban plazas, and pedestrian and/or bike paths.

- Berms will be used, whenever feasible, to screen undesirable views and provide a gentle undulation to the site. A 2:1 maximum side slope shall be utilized.
- Street trees shall be located adjacent to the curb and shall provide pedestrian scale and separate pedestrian from vehicular activity without reducing the required sidewalk area.

- Except for the vegetative barrier, all planting within setbacks shall be from the On-Site Plant Matrix.

3.7.3 Parking

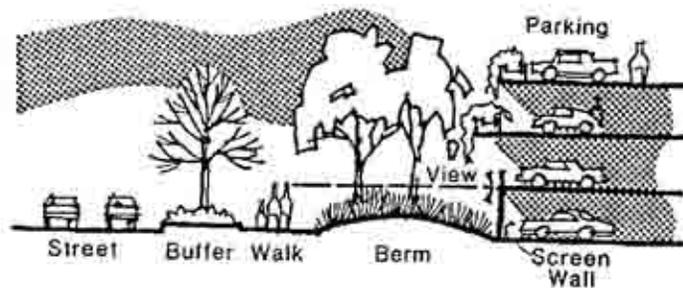
Parking garages and surface parking shall be visually screened by landscaping. The following guidelines should be applied to parking areas within the LCSP area:

- Surface parking areas shall be broken into sections which contain a maximum of 100 cars. Each parking area is to be separated by landscape buffers. Exclusive of setbacks from public streets, a minimum of 10 percent of the parking area shall be landscaped.
- Trees and shrubs may be combined with earthen berms to screen surface parking and parking structures from adjacent view corridors, development, streets, and river views.
- Cascading-type plant materials may be used in edge planters along each level of parking.
- Round-headed, shade-producing trees from the On-Site Plant Matrix are to be used on surface parking areas to reduce solar glare and provide variation in character.
- Trees shall have a mature height and spread of at least 30 feet. They should be long-lived (60 years or more), clean, strong, low-maintenance, and insect and disease resistant.

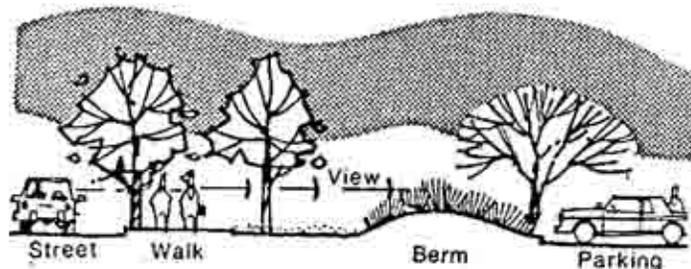
3.7.4 Open Areas (including pedestrian areas)

View Corridors

- A major objective of the landscape development should be to frame identified view corridors - especially up and down the river) - while providing the necessary erosion control and visual requirements.



SCREENING OF PARKING AREA
ADJACENT TO STREETS

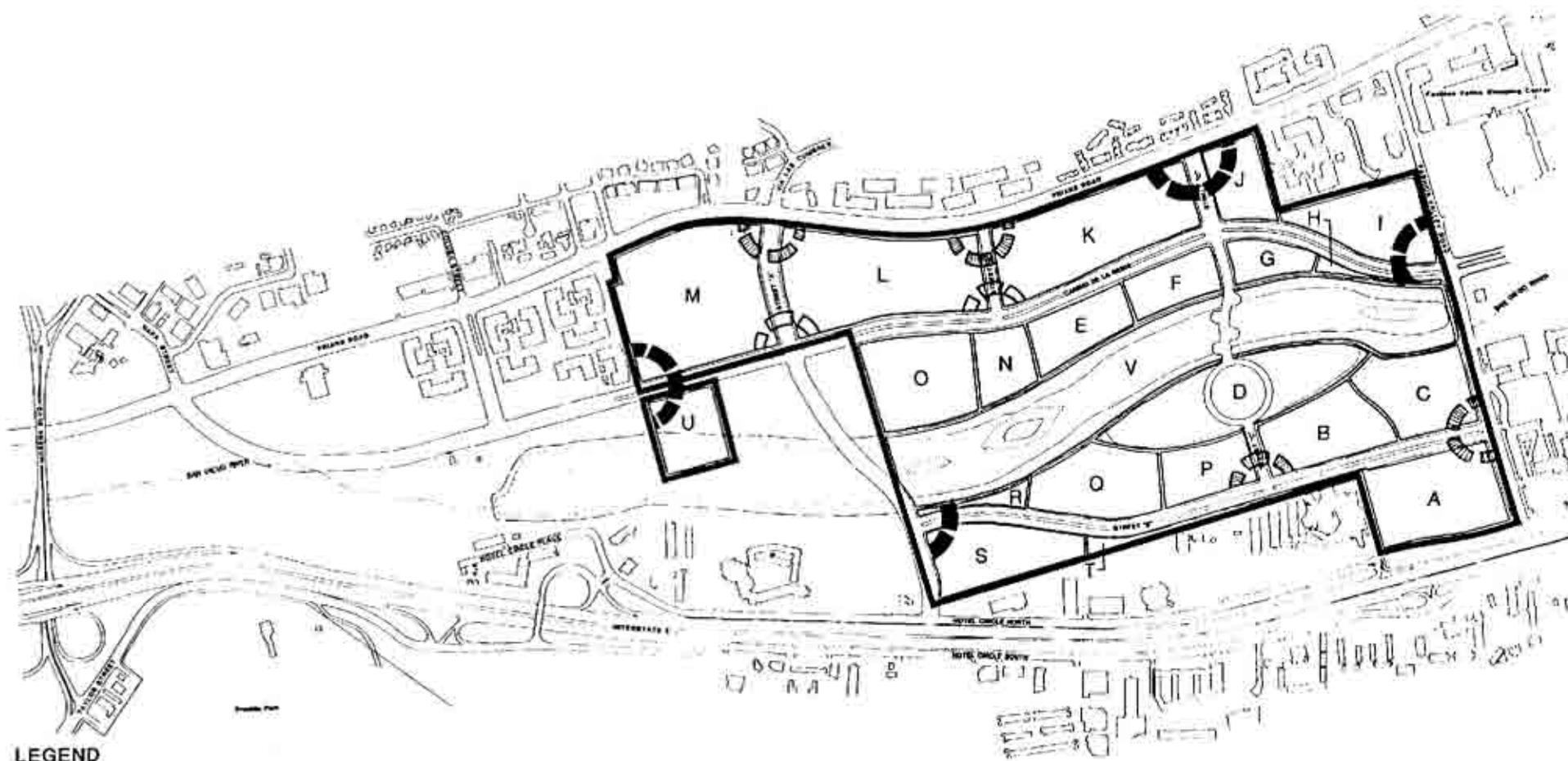


SCREENING OF PARKING STRUCTURE
ADJACENT TO STREETS

- To allow visibility at pedestrian levels, landscaping materials in the ground-level view corridors will include only tall trees with canopy vegetation, rather than short, dense trees.
- To screen unsightly or undesirable views near a slope area, large, dense shrubs shall be massed near the top of the slope, not the toe.

Landscape Design Requirements

- All areas not paved or built upon must be landscaped with trees, shrubs, and/or ground cover. Low-water-use plants and ground cover shall be used.
- Other than those areas in close proximity to the river or major streets, undeveloped areas need not be fully landscaped. As a requirement, these areas shall be seeded with a low-water-use ground cover mixture, which may be used in combination with existing trees. (Hydroseed Mix D is recommended, see Slope Planting Mixes found under Erosion Control in Section 3.10.3.)
- All graded slopes shall be promptly revegetated with ground cover, shrubs, and trees within 90 days of completion of grading.



LEGEND

- 

MAJOR THEME ENTRY
(120' RADIUS FROM CORNER)
- 

MINOR THEME ENTRY
(45' RADIUS FROM CORNER)
- 

SECONDARY THEME ENTRY
(90' RADIUS FROM CORNER)

**LEVI - CUSHMAN
SPECIFIC PLAN**



Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

FIGURE 3.12

**THEME
ENTRY
HIERARCHY**

Landscape Design Criteria

- Trees from the On-Site Plant Matrix should be provided in sizes which meet or exceed requirements of current city-wide landscaping regulations.
- The project shall utilize landscaping materials compatible with the native vegetation along the river corridor. In the area of highest development intensity, the San Diego River vegetation shall be brought into the common open space created by surrounding buildings.
- The use of turf for strictly visual reasons shall be minimized because of relatively high water use and maintenance costs, except when required for recreation areas or theme entries. At theme entries, use of turf is limited to 50 percent of the total area.
- Use of cool season grasses shall be limited to highly visible project entrances and areas intended for active recreation.
- Large walls or fences shall be visually softened with large shrubs or small trees.

3.7.5 Irrigation

- All irrigation systems are to be below ground, automatic, and fully in compliance with building code requirements. Use of water-conserving systems such as drip irrigation, moisture sensors, and low gallonage heads is required.

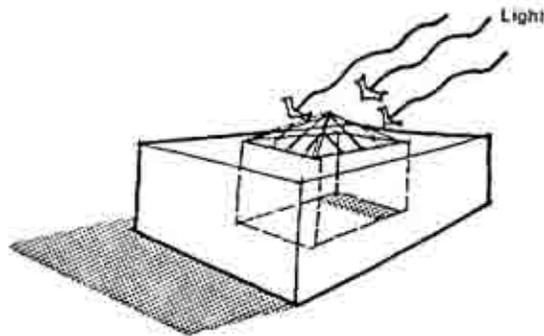
- All irrigation systems shall have separate water meters.
- All backflow control devices shall be located or screened so that they are not visible from public streets or parking areas.
- Spray from irrigation heads onto parking areas, drives, and walks shall be eliminated or minimized.
- Habitat areas in the riparian zone will be watered with a combination of overhead spray irrigation for hydroseeding and individual drip emitters for each shrub and tree. The system will be installed permanently, but will only operate for an initial vegetative establishment period.

3.8 CONSERVATION

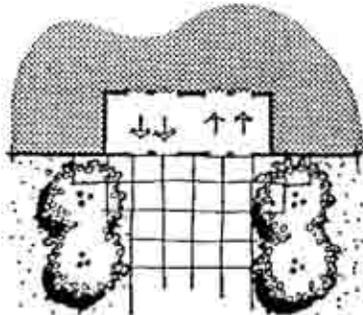
3.8.1 Energy Conservation

All new construction shall comply with building energy efficiency standards set forth in Title 24 of the California Administrative Code, Sections 1401 through 1410.

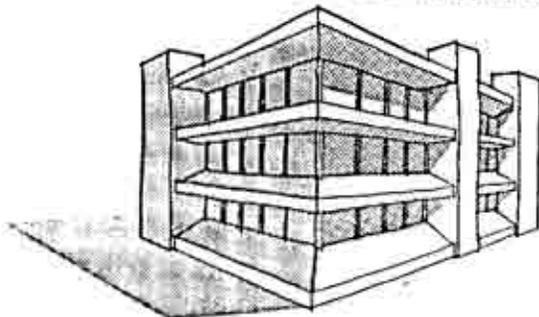
- Windows, skylights, light wells, and similar features shall be used to maximize natural lighting in work areas during daylight hours.
- Low-wattage light fixtures, dimmer switches, zoned lighting banks, and time-controlled lighting for public areas shall be used in the LCSP area.



BUILDING DESIGN
MAXIMIZES NATURAL LIGHTING

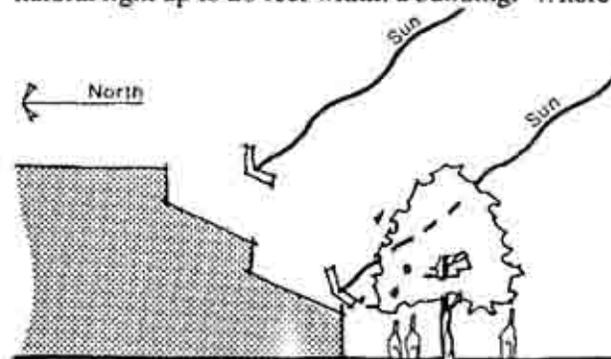


VESTIBULE AT ENTRYWAY
REDUCES HEAT OR COLD INFILTRATION



BUILDING FACADE WITH OVERHANG
REDUCES HEAT GAIN

- Vestibule use at entryways should be considered in order to reduce heat and cold infiltration into buildings.
- Cogeneration or district heating and cooling facilities usage will be encouraged.
- Overhangs or canopies shall be used to shade direct sun and reduce heat gain.
- Deciduous trees shall be used in south-facing and west-facing outdoor areas around buildings to provide solar access during winter months and shade in hot summer months.
- Large surface parking areas should be located to the east and north of adjacent buildings to reduce solar reflection on buildings.
- Building design should permit interior penetration of natural light up to 20 feet within a building. Where inte-



GLASS AREA ON BUILDING
ORIENTED TO THE SOUTH

rior areas are greater than 20 feet from windows, then skylights, light wells, interior courts, or similar architectural features should be provided.

3.8.2 Water Conservation

Water conservation can be achieved through the installation of pressure and flow reducing mechanisms within the water distribution system itself. The following objectives are water saving devices which have been deemed most appropriate and feasible to meet the water savings goal:

- Conserve water through the use of low-flow shower heads and faucets, low-flow toilets, cycle adjustment dishwashers, pressure regulators (maximum of 60 psi), hot water pipe insulation or instantaneous water heaters, automatic sprinkler systems with timers, and standard water meters and house connection pipe sizes (no oversizing).
- Conserve water through the use of low-water-use plant material.
- Conserve water through the use of drip-irrigation systems for tree plantings.
- Use of reclaimed water is encouraged.

3.9 NOISE CONSIDERATIONS

As development occurs within the LCSP area, the noise environment will be altered. The traffic volumes on roads will increase as a result of traffic generated by development within the specific plan area and by adjacent developments. Noise generated by the increased number of vehicles will also increase. The developments located adjacent to Friars Road could be subjected to noise levels in excess of City standards. Future development plans for the specific plan area should therefore contain measures to reduce potential noise effects through either site design or the construction of noise barriers, including the following:

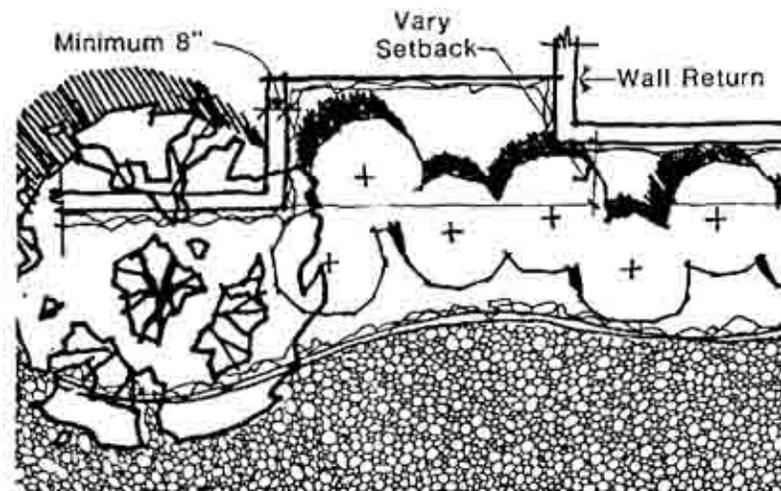
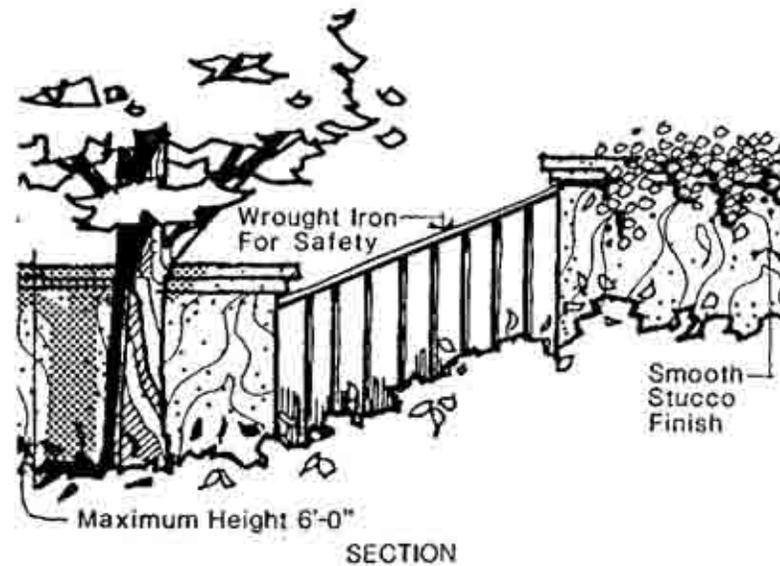
- An acoustical analysis shall be prepared for all the areas proposed for residential development at the time Planned Development permits are processed.
- Noise mitigation measures, including but not limited to walls, berms, setbacks, and orientation, shall assure that noise levels will not exceed standards set by the General Plan of the City of San Diego.
- Conformance with Section 24-2501 of the State Building Code, which applies to dwellings other than detached single-family homes shall be maintained.
- Careful site planning shall be utilized to reduce potential noise effects, particularly of outdoor recreation areas. Locating land uses such as garages or parking lots immediately adjacent to Friars Road and other noise pro-

ducers and setting development back from the street would help to accomplish this objective.

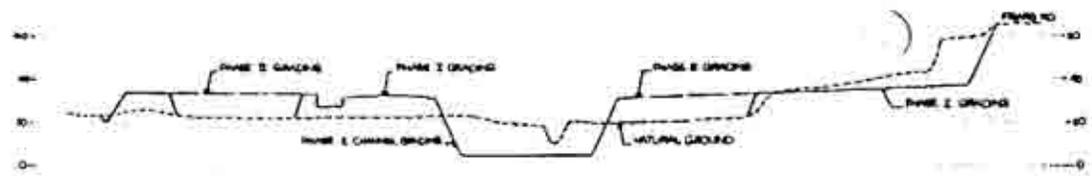
- In all areas adjacent to Friars Road, either setbacks or elevation differences sufficient for noise buffering will be maintained. Accurate readings for noise levels shall be determined for all proposed development along Friars Road prior to site design to determine if increased setbacks and/or offsets are necessary for noise mitigation.
- Berms are the preferred noise attenuation method along Friars Road. In areas where berms are not feasible for noise attenuation, walls may be used for the same purpose. The character of these walls should create visual interest by offsets in facade to avoid strictly linear walls and therefore relieve monotony and allow incorporation of landscaped recesses.
- When perimeter walls are used in the project, these walls will be of a strong, simple, unadorned character with a minimum 8" thickness and maximum 6'0" height.
- Tops of all perimeter walls should be kept horizontal. Where grade changes occur, the walls should stop and incorporate a short return. Spaces between walls should be heavily planted.

3.10 EARTH MOVING/GRADING

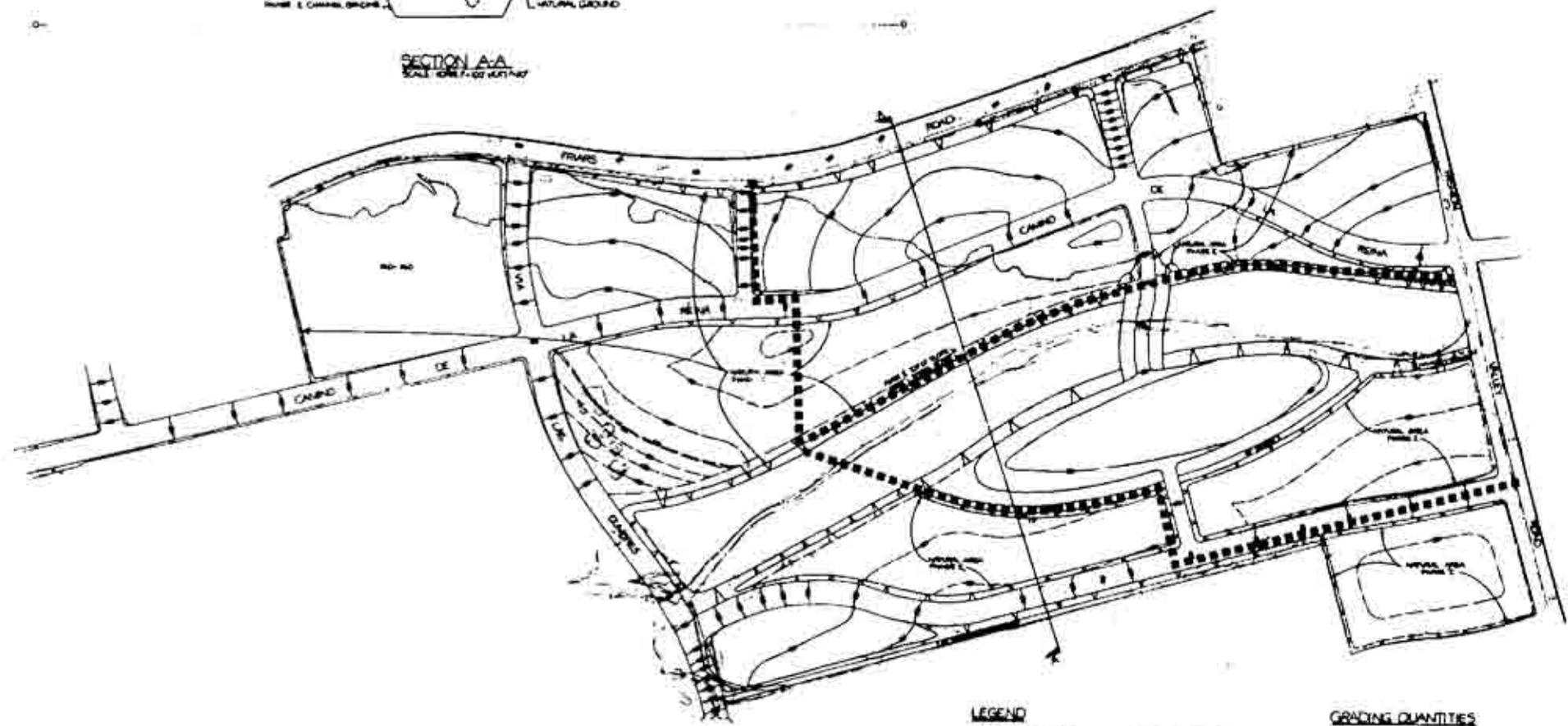
Grading within the project area will occur in a sequence determined by the overall phasing of development, although grad-



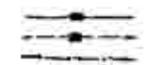
PERIMETER WALL TREATMENT:
GRADE CHANGE AND ARTICULATION



SECTION A-A
SCALE: 1/8" = 1'-0" HORIZONTAL
1" = 10'-0" VERTICAL



LEGEND
 PHASE I GRADING
 PHASE II GRADING
 DAYLIGHT LINE



GRADING QUANTITIES

CLASSIFICATION	QUANTITY
CUT:	
CHANNEL	800,000 CY
OTHER	837,000 CY
TOTAL	1,637,000 CY
FILL:	
PHASE I	1,000,000 CY
PHASE II	1,000,000 CY
TOTAL	2,000,000 CY
NET CUT:	
PHASE I	800,000 CY
PHASE II	1,000,000 CY

Circulation system is schematic; see Figure 5.2 for anticipated system improvements.

LEVI - CUSHMAN
 ARCHITECTS

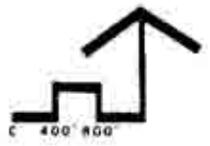


FIGURE 3.13

PRELIMINARY GRADING PLAN

ing for the river channel will be an early element of the development program. A preliminary grading study, Figure 3.13, indicates that imported fill material will be necessary to achieve the grade relationships identified in the Specific Plan. Existing loose and porous soils will be removed and recompact as required by the soils engineer prior to subsequent placement of fill materials. Suitable fill materials will be imported from off-site as required to construct fills per plan. Surcharge may be required in some areas to expedite consolidation of subsoils. A complete earth-moving and grading program will be provided with the first PCD/PRD submittal.

3.10.1 Flood Channel

The proposed flood channel involves excavation to as low as elevation 5 (mean sea level datum). Off-site grading will occur west of the project to accommodate Street A. Design proposals will be coordinated with Warner Ranch property owners on the western boundary of the project area. It is anticipated that all material excavated will be suitable for fill on-site and in roadway areas.

Channel slopes will be curvilinear in order to create a natural setting. Slope protection will be provided where required in areas of high velocity during flood stage. Slopes will generally be 2.5:1 in the main channel. Grading in the flood channel will require some work below the existing groundwater level and will involve restrictions regarding work during the rainy season.

The flood channel through the project is coordinated with but designed to be independent of upstream and downstream development. If development downstream of the project has not occurred by the time the channel through the LCSP area is completed, then a drainage swale will connect the western end of the new channel to the eastern end of the existing channel.

3.10.2 Streets

Major street grading for Street A, Camino De La Reina, and other on-site collector streets will be accomplished according to City of San Diego grading specifications to provide a suitable roadway subgrade. All slopes adjacent to roadways will be 2.5:1 or flatter and curvilinear in form to blend in with existing topography and the proposed site grading. Grading will be necessary off-site to the west whenever the connection of Camino de la Reina with Napa Street occurs to permit LRT use.

3.10.3 Site Grading

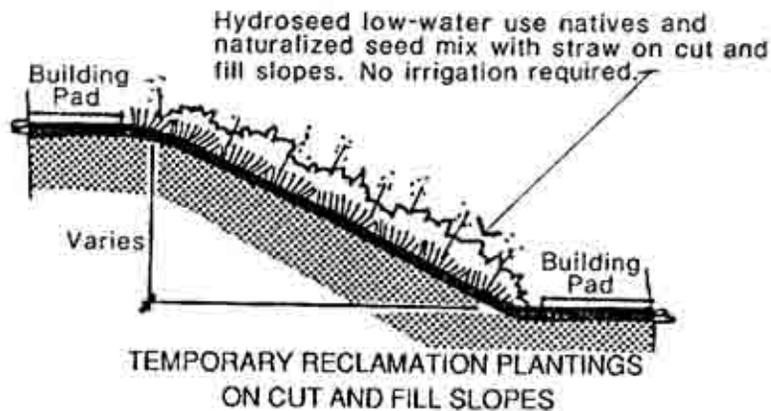
Site grading will consist of normal cut and fill grading operations and will be constructed according to the recommendations of a qualified soils engineer to provide suitable building sites for designated land uses. Grades will generally be dictated by architectural considerations but must also be established to maintain building sites above the 100-year flood level and provide a suitable grade relationship to the adjacent roadways. Grading for the flood control channel will provide fill materials for street construction. Suitable erosion control

techniques will be used to maintain existing drainage facilities in operation during all construction operations.

It is anticipated that all slopes will be curvilinear in form and meet the stability requirements of the soils engineer and the City engineer.

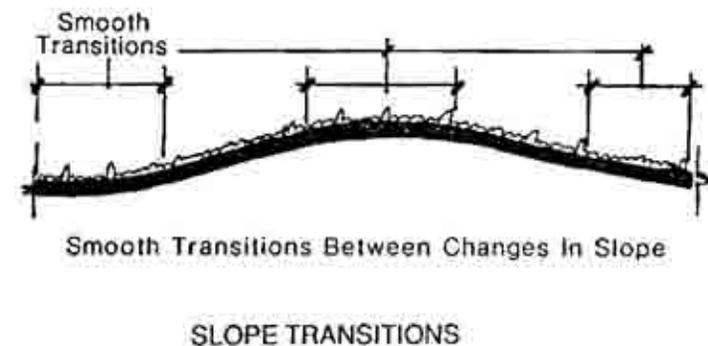
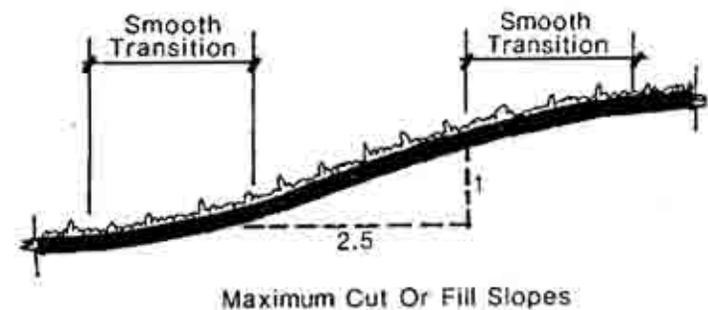
Slope Treatment

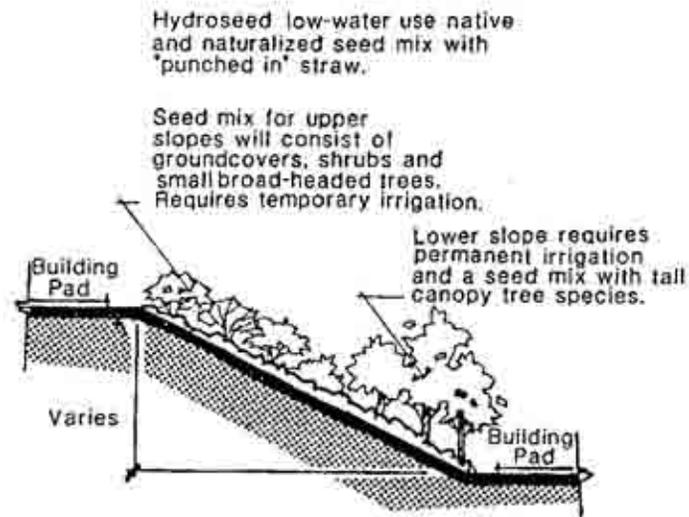
- In general, sharp, angular forms shall be contour graded to reflect the natural terrain. All graded slopes shall be landscaped. Where appropriate, buildings should be sited to conceal graded slopes.
- No cut or fill slopes of any type will be steeper than 2.5:1 with smooth vertical transitions.
- Cut slopes over ten feet in vertical height will be serrated to provide a more suitable surface for revegetation, as determined by EQD.



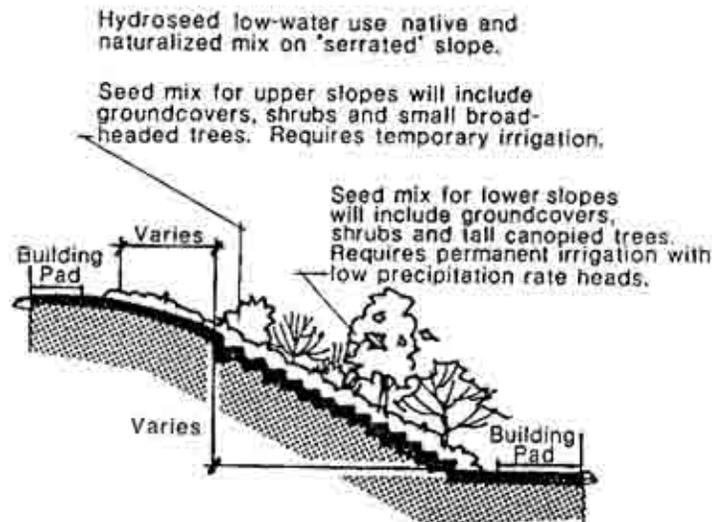
Erosion Control

- Measures shall be taken during construction to control runoff and erosion from construction sites. Filter fabric fences, heavy plastic earth covers, gravel berms, or lines of straw bales are a few of the techniques which shall be considered.





PERMANENT PLANTINGS ON FILL SLOPES



PERMANENT PLANTINGS ON CUT SLOPES

- Resurfacing of parking lots and roadways should take place as soon as practicable and not at the completion of construction.
- Phasing of grading will take place so that prompt revegetation or construction can control erosion.

3.10.4 Slope Planting Mixes

Hydroseed Mix A

For use on temporary slope areas of greater than 5:1 slope:

Eriogonum fasciculatum
Eschscholzia californica
Lupinus succulentus
Plantago indica
Salvia mellifera
Trifolium hirtum "hykon"

Hydroseed Mix B

For use on lower portions of permanent slopes:

Acacia cultriformis
Baccharis pilularis ssp. consanguinea
Callistemon citrinus
Cistus corbariensis
Encelia californica
Eriogonum fasciculatum
Eschscholzia californica

Eucalyptus cladocalyx
Eucalyptus polyanthemus
Fremontodendron mexicanum
Heteromeles arbutifolia
Parkinsonia aculeata
Prunus caroliniana
Rhus laurina
Schinus terebinthifolius

Hydroseed Mix C

For use on upper portions of permanent slopes:

Acacia cultriformis
Acacia longifolia
Baccharis pilularis ssp. consanguinea
Cistus villosus
Encelia californica
Eriogonum fasciculatum
Eschscholzia californica
Eucalyptus lehmanni
Fremontodendron mexicanum
Lupinus succulentus
Mimulus puniceus
Plantago indica
Rhus integrifolia

Hydroseed Mix D

For use on temporary flat areas not exceeding 5:1 slope:

Bromus mollis
Bromus rubens
Eschscholzia californica
Lupinus succulentus
Plantago indica